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AUTHOR Abbas, Elizabeth K., Ed.; Sitlington, Patricia L., Ed.
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ABSTRACT

The document opens with a 14-page state of the art review discussing influences which affect educators who prepare personnel involved with special needs students. These influences include: professional dissatisfaction; leadership groups, including legislative bodies and professional organizations; current issues and trends, including career education, mainstreaming, and competency based teacher education; and a number of specific influences that affect teacher education. The abstract section of the document is divided into the following topics: (1) issues and trends in vocational and special education (books, papers, and articles covering: some issues in vocational education, mainstreaming--alternatives to special education classes, and the new school population--the severely handicapped); (2) selected programs for special needs students (mostly descriptions of programs); (3) issues in the area of competency based teacher education (including competency based teacher education, competency identification for vocational teacher education, and competency identification for special teacher education); and (4) existing university-level personnel preparation programs (giving program descriptions, location, and contact person). Each abstract includes the title, author, publication, and date. A glossary of terms used in special education and vocational education is included. (EC)

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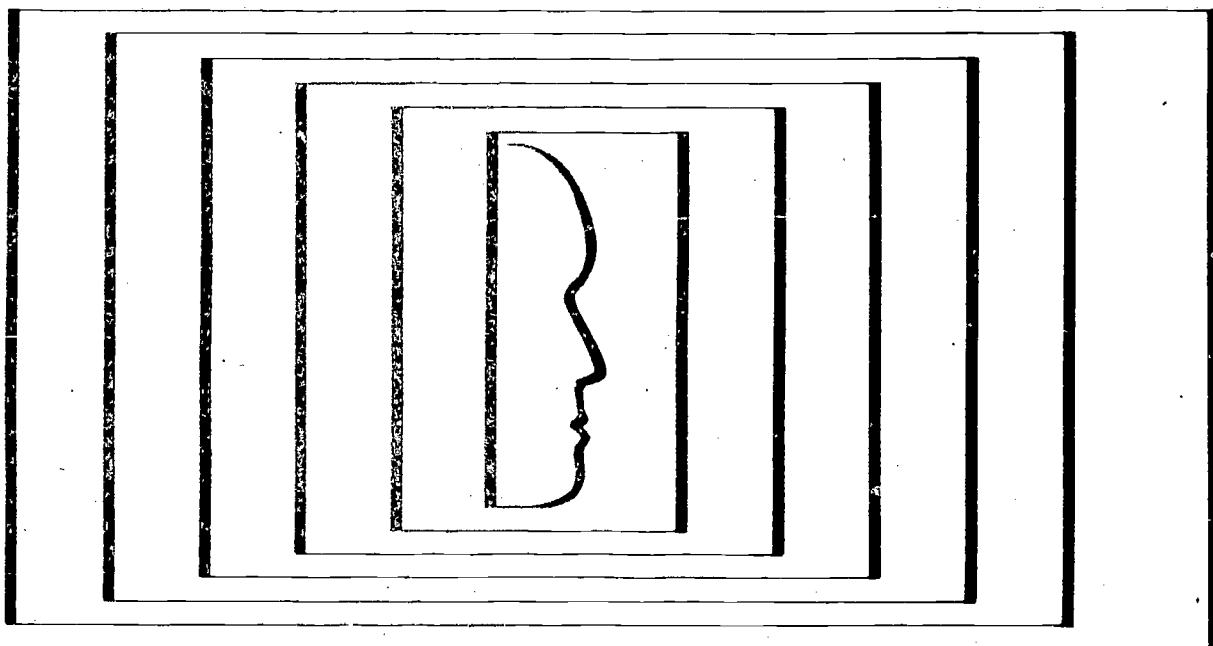
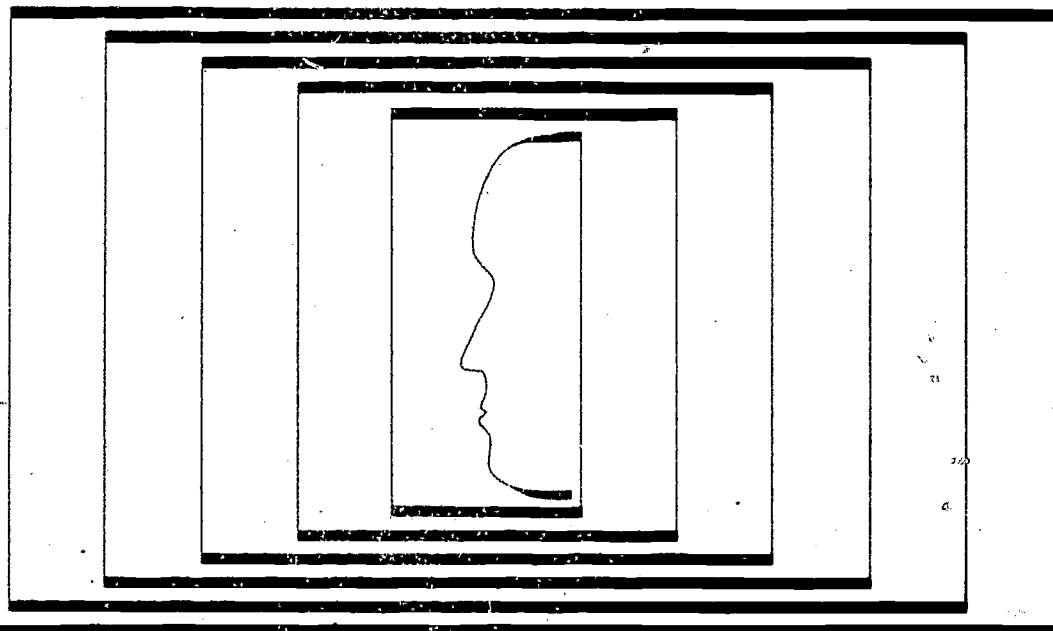
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Issues in the Preparation of Personnel for the Vocational Programming of Special Needs Students: Synopsis of Selected Materials

U.S. DEPARTMENT OF HEALTH,
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Issues in the Preparation of Personnel for
the Vocational Programming of Special Needs Students:
Synopsis of Selected Materials

Edited by:

Elizabeth K. Abbas, University of Illinois
Patricia L. Sitlington, University of Kansas

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Co-Directed by:

Rupert N. Evans, Professor
Department of Vocational and
Technical Education
College of Education
University of Illinois
Urbana, Illinois 61801

Dr. Gary M. Clark, Professor
Department of Special Education
School of Education
University of Kansas
Lawrence, Kansas 66045

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Table of Contents

I.	The State of the Art	I:1
	<i>Dr. Gary M. Clark</i> <i>Dr. Rupert N. Evans</i>	
II.	Issues and Trends in Vocational and Special Education . .	II:1
	A. Some Issues in Vocational Education	II:2
	<i>L. Allen Phelps</i> <i>Elizabeth K. Abbas</i>	
	B. Mainstreaming: Alternatives to Special Education Classes	II:6
	<i>Patricia L. Sitlington</i>	
	C. The New School Population: The Severely Handicapped. .	II:14
	<i>Patricia L. Sitlington</i>	
III.	Selected Programs for Special Needs Students	III:1
	<i>Elizabeth K. Abbas</i> <i>Gary M. Clark</i>	
IV.	Issues in the Area of Competency-Based Teacher Education .	IV:1
	A. Competency-Based Teacher Education	IV:2
	<i>Elizabeth K. Abbas</i>	
	B. Competency Identification for Vocational Teacher Education	IV:4
	<i>Elizabeth K. Abbas</i>	
	C. Competency Identification for Special Teacher Education	IV:19
	<i>Patricia L. Sitlington</i> <i>Patricia P. Kells</i>	
V.	Existing University-Level Personnel Preparation Programs .	V:1
	<i>Elizabeth K. Abbas</i>	
VI.	Glossary of Terms in Special and Vocational Education. .	VI:1
	<i>Elizabeth K. Abbas</i> <i>Patricia L. Sitlington</i>	

This document has been completed with the intent that it will be useful to individuals interested in the training of personnel to work with special needs students. It is not intended to be exhaustive in presenting materials or programs, but rather as an indication of what is being done throughout the country. We hope that this will encourage communication among vocational and special educators as they plan their programs together.

The editors would like to thank those people who helped to make this document possible: the typists--who spent a good deal of time decoding our handwritten copy--Jeanette Holmberg, Patricia Gunther, Jean Cameron, and Shirley Lockard; Secretary, Carma Diel; graphic artist, Ron Zavacki; our colleagues Allen Phelps and Tim Sterling and the project co-directors Gary Clark and Rupert Evans who provided invaluable guidance.

**Preparing Vocational and Special Education Personnel
to Work With Special Needs Students:**

A State of the Art

Gary M. Clark

Rupert N. Evans

The state of the art in preparing vocational and special education personnel to work with special needs students is inextricably interwoven with the states of the art in vocational and technical education, career education, and teacher education, and in the education and training of the handicapped. This statement will examine the field by relating the roles of teacher educators who are interested in preparing personnel to work with special needs students* to the various education influences to which they must respond.

The Influence of Professional Dissatisfaction

The first of these influences is current professional dissatisfaction with the nature and rate of progress made since 1963 and especially since 1968 in vocational provisions for special needs students. Leading teacher educators from vocational education and special education have become increasingly concerned about the lack of response to the 1963 Vocational Education Act by state departments of education, local school districts, area vocational schools, community colleges, and colleges and universities.

* The terms "special needs students" and "handicapped students" will be used interchangeably since special needs implies a handicap in school, whether due to disability, disadvantage, or dysfunctional school placement.

Unfortunately, however, until the past year or two, the extent of this concern by most teacher educators has not been great enough to muster more than a few isolated efforts to do much about the problems being identified. Part of this failure to act was due to a lack of a data base on programs and other funded activities, but when data started to emerge, early impressions began to be confirmed. These data include such items as: (a) handicapped youth are still being under-served, (b) state-wide programs are rare, (c) special projects providing for isolated programs are the most common programming response, and (d) there are shortages of teachers qualified to work with the handicapped. The general state of the art, given these data, appears to be in its infancy, and it would appear that professional dissatisfaction has not as yet been sufficient to bring about needed change.

The Influence of Leadership Groups

A second educational influence to which teacher educators in vocational education and special education must respond is that of educational leadership groups. These include the Congress and state legislatures, the U.S. Office of Education, state departments of education, and professional organizations. The state of the art for leadership groups in advocating personnel preparation programs for those working with special needs students is, again, at a rather embryonic or early developmental level.

Congress and State Legislatures. Congressional dissatisfaction has continued to grow as it has become clear that schools have responded only haltingly to the express Congressional marching orders contained in the 1968 Vocational Education Act Amendments. These amendments require that 25% of Federal vocational education funds be spent on special needs students (15% for disadvantaged plus 10% for handicapped students). If schools do not respond to express economic incentives, something must be wrong.

Legislative dissatisfaction can also be noted in the trend of state level mandates that special education programs and services be provided by the public schools. However, in formulating mandatory special education legislation, few states have as yet specifically mandated the provision of vocational education for the secondary, post-secondary, or adult handicapped population. Most of these laws include requirements only for prevocational or work-study experiences which have traditionally been provided by special educators. This has tended to negate any specific responsibilities for vocational educators.

U.S. Office of Education. Leadership groups at the Federal level are caught in complex socio-political pressures which siphon off their energies and efforts in an attempt to address a myriad of priorities. The priority of vocational programming for special needs students has suffered from the political factors operating in commitment to and involvement of various Federal leadership groups in their own priorities. The Bureau of Occupational and Adult Education cites programs for special

needs students as important. The Bureau of Education for the Handicapped cites vocational programming for the handicapped as one of its top funding priorities. The Office of Career Education cites career education programs for the handicapped as a priority for field initiated studies. Under the Education Professions Personnel Development Act (the funding source for this national workshop) the Vocational Education Personnel Development Branch has as one priority the development of personnel preparation programs for special needs personnel. Each of these leadership groups within the national office is striving for common goals, but largely without a master plan from the U.S. Office of Education and often without significant interaction or communication among themselves.

State Departments of Education. State departments of education have replicated the federal pattern in most instances. Iowa is one notable example, however, among a few of the states, that has defused the political tension and relieved the duplication of effort. This was done by placing the program for special needs directly under the state commissioner of education and staffing it with vocational and special educators. It still remains to be determined whether separation of special needs personnel from the state vocational education hierarchy will lead to less emphasis by vocational education decision makers on programs which emphasize mainstreaming. No examples are known of state offices which have placed all special education personnel under the aegis of the state department of vocational education.

In one area where states have almost complete leadership control, certification of educational personnel, there has been a tomb-like silence from 1968 until recently when a few states, e.g., Nebraska and New Jersey, began to adopt certification standards which require certain competencies for personnel who provide vocational programming for special needs learners. Special educators at the secondary level have long been free to teach in prevocational and work-study programs without any certification requirements other than basic special education requirements. Similarly, vocational educators have been free to teach special needs students of any type without specific preparation. Obviously, a real leadership void exists in certification standards.

Professional Organizations. Professional organizations have been only moderately responsive to the need for leadership. The principal activities have been the establishment of a Special Needs Section in the American Vocational Association and planning for a parallel group in the Council for Exceptional Children. In 1973 these two organizations cooperated in the sponsorship of a national conference on career education for exceptional students, but little continuing leadership commitment to professional personnel development has been apparent. Cooperative leadership is critically needed within and between major professional organizations to foster personnel preparation programs at the national and state level.

Teacher Education. Teacher educators in vocational and special education have not found a significant amount of leadership from within their own ranks. Colleges and universities have been extremely slow

since 1968 in developing personnel preparation programs to meet the demand for special needs programs. There has been a degree of circularity in the problem as schools of education respond primarily to state and local manpower demands which reflect shortages in existing programs. The schools and state departments, on the other hand, are cautious about initiating programs without qualified personnel. Joint programs between vocational education and special education have been rare. The past two or three years has seen a number of departmental programs develop with vocational educators training their own students to work with the handicapped, and special educators training their own to provide prevocational, sheltered workshops and part-time cooperative shelter programs designed to serve similar populations. Truly cooperative programs involving special educators and vocational educators on an equal footing have been rare. Because we are concerned principally with teacher education involving both groups, this topic is expanded later in this paper.

The Influence of Current Issues and Trends

A third educational influence affecting the state of the art in preparing special needs personnel in vocational and special education is the impact of current educational issues and trends. Some major issues and trends in vocational and special education which interact with the educational influences described above include career education, "mainstreaming," and competency-based teacher education.

Career education has been both a boon and a bane to vocational and technical education. It has brought increased professional status, wider legitimacy and acceptance in academia, and greater visibility within the field of education in the eyes of the general public. It has also resulted in some identity problems and has incorporated some new values and objectives which extend well beyond traditional vocational goals. Further, some vocational educators feel that it has diluted the political and economic support base vocational education has had through the years in a period when funding sources are decreasing in both number and amount of available support. Teacher educators in vocational and technical education have had to determine their roles in the current career education movement and place them somewhere among their priorities. The addition of any new priority consideration--especially one as economically, politically, and professionally potent as career education--cannot help but affect special needs programming as a competing priority. Career education appears to have had little effect on special education at the secondary level.

Mainstreaming has had, and will continue to have, major impact on vocational and special education. Related to the mainstreaming concept are current issues such as "least restrictive alternative," "normalization," and deinstitutionalization. The implications of these issues and trends are already apparent in court decisions and state legislative mandates for local schools. The discerning teacher educator in vocational and special education can see the impact of these decisions on

personnel preparation programs: (a) a shift downward in the lower range of entering level competencies of students in the schools, (b) a wider range of physical, sensory, and mental performance levels in students placed in regular education programs, and (c) the need for new professional roles not heretofore included in personnel preparation programs. The state of the art in meeting these needs in teacher education is relatively primitive, and is the primary motivation for this national workshop.

Competency-based teacher education has had perhaps a greater emphasis in vocational and special teacher education than in any other educational disciplines. The status of the field, in reacting to this emphasis, is still at the pioneer level. Only a few isolated efforts have been made to identify systematically those competencies needed by teachers of handicapped youth and then to relate those competencies to some model for preparing personnel specifically for those roles. Much work remains to reach a level of program development in teacher education that is truly competency-based, but which does not eliminate those affective and problem-solving skills that are so crucial in personnel preparation.

Specific Influences Affecting Teacher Education

The influences of professional dissatisfaction, of leadership groups and of current issues and trends operate against a background of specific influences within teacher education:

Structure and Attitude of Separate Mission. In many universities, vocational teacher education is provided by a number of weakly federated departments, often in different colleges. Even when these groups are combined in the same department they tend to retain different missions related to the age groups they should serve, the goals of their program, and the ways in which the program should be evaluated. One group, for example, may believe strongly that a good secondary school program places a high proportion of its graduates in the occupation for which they were prepared. Another group may feel strongly that this is unimportant.

Special education is in another department, perhaps in another college, or even in a different university. Often it is less concerned with meeting the needs of employers than are most parts of vocational education.

These and other differences in structure and in mission inevitably lead to difficulties of communication.

Different Age Groups Served. Special education has tended to emphasize service to youth in elementary schools and in early childhood education. Vocational education has emphasized service to adolescents and young adults. Both groups give little more than lip-service to serving adults. Slow learners often need early pre-vocational training from vocational educators who recognize the needs of pre-adolescents. Adolescents and adults in vocational programs need help from special educators who don't treat them as children.

Teacher Shortage. Teacher education programs in both vocational and special education usually have been able to place all the teachers

they prepare. This minimizes pressure to establish new programs, but it also leads local education agencies to employ unqualified people to teach.

State Teacher Certification/Endorsement Barriers. There are a number of indications that vocational and special educators who are qualified in one, but not the other of these two fields, are teaching in situations where both types of competencies are needed. It seems unlikely that many teachers will spend the time required to achieve full qualifications in each field. But most certification/endorsement structures seem to assume that it is better to have a teacher who is completely qualified in one field being taught and completely unqualified in another than it is to have certification based on achievement of most qualifications for both fields.

Teacher Education Program Approval Barriers. In addition to the preceding barriers, it is becoming more difficult to secure approval of new teacher education programs. Much data, paperwork and time are needed to secure approval at each of the increasing number of levels through which proposals for new programs must move. Some situations require the abandonment of an existing program before a new one can be approved.

Lack of Data on Which to Base Personnel Development Programs. In spite of the fact that data can speed the program approval process, we have virtually no needs assessment data, and little follow-up data on programs at either the LEA or teacher education level.

Barriers to Joint Appointments. A logical way to undertake program development and to facilitate communication is to institute joint appointments between the special and vocational teacher education departments. Such appointments are rare, however, and one reason is that there is a general belief that assistant and associate professors who hold joint appointments will have difficulty in securing promotion. An even more compelling reason would seem to be the extreme shortage of young professors who are acceptable to both departments.

The Increasing Diversity of Special Needs Population in Vocational Education. At one time, most vocational educators accepted the dictum of the Smith Hughes Act that vocational education should serve only those who could profit from it, and they interpreted this phrase to mean that special needs learners should be excluded whenever "more able" students could be found. Nevertheless, vocational education always has served a high proportion of the students who did not do well in the college preparatory program. Now there is gradual acceptance that vocational programs must also educate the severely handicapped, bilingual students, corrections populations, migrants, and the adult handicapped. As career education programs are installed, the gifted increasingly are enrolling. This range of students obviously requires an increased range of teacher competencies and revised teacher education programs.

The Changing Legislative Picture. Legislative bodies seem remarkably adept at mirroring the views of society. If so, then, obviously these views have been changing in ways which affect special education and vocational education. Increasingly, we have state legislation which mandates

special education for all persons from early childhood through young adulthood. Congress seems more and more determined to insure that vocational education will attend thoroughly to the needs of neglected learners. Cities and states are given large sums through the Comprehensive Employment and Training Act for the training and re-training of unemployed and underemployed adults, almost all of whom have special needs. Not only the Labor Department, but also most other Federal agencies are involved in similar programs.

No one can predict what the next legislative actions will be, but it is easy to predict that actions will come and that they will affect vocational and special education. Already there is an enormous need for inservice education of teachers and support personnel. With continued changes there is no way that pre-service teacher education programs will be sufficient to meet the need.

Summary

The state of the art, then, in personnel preparation for those who will plan and implement vocational programs for special needs or handicapped students is in an early developmental period. It suggests the existence of a growing number of advocates from both vocational and special education who realize the enormity of the task and the urgency of cooperative planning. It suggests that the issues and trends of the times will affect the rate at which progress will be made, but that the die has been cast through court decisions and legislation, leaving no

doubt about the legal consequences for those who do not comply. It suggests that there is a leadership void at all levels and that isolated, unilateral programming, which meets only a small part of the need, will continue unless strong leadership emerges.

Given increased cooperative efforts of vocational and special teacher educators and the strength of the existing and prospective legal base, the current state of the art may be transitional and the outlook for future improvements to the art may be bright. It is hoped that this national workshop may be a turning point in that development.

II. ISSUES AND TRENDS

IN VOCATIONAL AND SPECIAL EDUCATION

The purpose of this section of the document is to give the reader a basic understanding of some of the issues and trends in both vocational and special education. The main concern is dealing with these issues in terms of their relationship to personnel preparation for work with special needs students. It is hoped that this information will give individuals in both fields the ability to communicate with each other in order to improve the education of the special needs student at the secondary level. With this in mind, the section is broken down into those readings dealing primarily with issues in vocational education and those dealing with special education issues.

The two main issues being dealt with in the special education area are: (1) Mainstreaming - the movement to provide alternatives to the placement of the handicapped or special needs student in a special education class for the entire day or even the major part of the day and (2) The population of severely handicapped students who will be entering the public educational system for the first time as a result of court decisions and legislation. This population will include former residents of institutions who are now residing in foster and group homes in the community.

II A. SOME ISSUES IN VOCATIONAL EDUCATION

Title: Career Education and Vocational Education:
Similarities and Contrasts
Author: Rupert N. Evans
Date: January 2, 1975

This paper examines the similarities and differences between career education and vocational education. Career education is the newer, broader concept of which vocational education is a part. Among the concerns of career education (which are not an integral part of vocational education) are: 1) career awareness and exploration, 2) preparation for professional careers, 3) preparation for nonpaid work, and 4) education in work-seeking skills. Another major difference between vocational and career education is the population served; career education is designed for all people of all ages whereas vocational education usually does not begin until age 14 or 16. Problems in the relationship between career and vocational education, as seen by Evans are: 1) aspects of career education other than vocational education have been neglected at the high school level, 2) career education has been misunderstood and used by people merely to gain financing for programs whose goals are vastly different from career education, and 3) the awareness and exploration stages of career education have been neglected at the high school and post secondary school levels. It is suggested that since career education and vocational education "share the goal of making work possible, meaningful, and satisfying for everyone" they should complement each other to improve all education.

Title: The Challenge of '68: A Commitment That Won't Go Away
Author: Don Gentry
Publication: American Vocational Association Journal
Date: September, 1974 pp. 32-33

This article explores five areas in which vocational education must improve its performance in terms of special needs students. The five areas mentioned are: 1) attitudes, 2) program flexibility, 3) cooperation with other agencies and individuals, 4) insuring financial support, and 5) commitment to student needs. Beyond these five individual areas of concern, there must be a continued effort to meet the needs of "all" students.

Title: What is the Role of Federal Assistance for Vocational Education?
Author: Comptroller General of the United States, Office of Education
Department of Health, Education and Welfare
Date: December 31, 1974

The General Accounting Office (GAO) reviewed the operation of vocational education programs in seven states. The report lists several recommendations for the U.S. Office of Education and the Congress to consider relative to vocational education for the handicapped. The major recommendation is that either the states should be required to match the federal set-aside expenditures for handicapped and disadvantaged, or the percentage of the federal set-asides for these categories should be increased. The report suggests that "persons with special needs have not been given a high priority." In FY 1973, a total of 14 states were still spending less than the Part B set-aside minimums of 10% for the handicapped and 15% for the disadvantaged.

It was also noted that the proportion of disadvantaged and handicapped enrollment has declined relative to total enrollments in vocational education from FY 1971 to FY 1973. Office of Education officials contend that the declining enrollments are reflective of improved practices for classifying students.

Title: An Assessment of Vocational Education Programs for the Handicapped Under Part B of the 1968 Amendments to the Vocational Education Act: Executive Summary
Author: Olympus Research Corporation, San Francisco, California
Date: January, 1975

This federally-supported research study focused on an assessment of the Part B set-aside program for the handicapped under the 1968 Vocational Education Amendments. The primary focus of the study was identifying and analyzing: (1) constraints on program operation (at both the state and local levels), (2) post-program performance of students and, (3) strategies for identification of students.

The state-level assessment, which was conducted in 25 states, revealed that: (1) state advisory councils for vocational education were, for the most part, inactive in the set-aside program, (2) for all practical purposes, productive relationships between vocational education, special education, and vocational rehabilitation were nonexistent, (3) 22 of the 25 states expended their set-aside monies on a project basis, (4) only limited amounts of funds are expended on effective state level administration, thus creating many of the problems.

The project-level assessment included 92 representative local projects, and revealed that: (1) nearly 70% of the projects did not integrate the handicapped student with the nonhandicapped, (2) 20% of the projects were primarily work experience programs, (3) approximately 77% of all students enrolled were classified as mentally retarded (12% of these were classified as trainable mentally retarded), (4) in all projects staff training was conducted only on an informal basis, but most districts encouraged personnel to pursue continued professional training, (5) administratively, vocational and special education appear to have blended together well at the local level, (6) evaluation and classification of students by handicapping condition occurred before students were referred into vocational programs, (7) classification of students in mentally handicapped categories (except for trainable mentally retarded) was a source of tension to educators, students, and the general public, (8) there appears to be a trend toward categorizing all handicapped students (as well as disadvantaged students) into a "special needs" category, (9) theoretical commitments to individualized instruction have not been translated into action, (10) 63% of the handicapped students were enrolled in nonskills training courses (52% of these were enrolled in prevocational courses), and (11) vocational aptitude assessments should be conducted by vocational personnel on handicapped students who are referred to the vocational program.

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Title: A Review of the Vocational Amendments of 1968 as
Related to the Handicapped
Author: Ernest E. Singletary
Date: April, 1973
EDRS Price: MF - \$0.65 HC - \$3.29

In order to develop a greater degree of understanding and appreciation of the Vocational Education Amendments of 1968, this legislation development of Vocational Education is reviewed with particular emphasis on the ten per cent of each State's basic annual allotment to be spent for the handicapped. Handicapped is defined and guidelines for teachers are given; for example: 1) train for acquisition of basic employability characteristics 2) provide information on relationship between academic skills and vocational training 3) train to the level of competency which matches student potential and 4) combine school with on-the-job training whenever possible. Interagency cooperation for delivery of quality services to the handicapped is explored. Surveys to identify population to be served and to serve, recruitment activities for handicapped persons, school scheduling and program modifications are suggested as services available for funding under this act. There is an appeal for more cooperation and interest from vocational education, vocational rehabilitation and special education in order to provide higher levels of training and employability for the nations handicapped people.

Title: Statement Before The Subcommittee on Elementary, Secondary,
and Vocational Education Committee on Education and Labor,
United States House of Representatives
Author: Rupert N. Evans, University of Illinois at Urbana-Champaign
Date: April 30, 1975

In this statement Evans presents some of the more important concerns for vocational educators. There is a critical shortage of vocational teachers in some parts of the United States and the problem is even greater in terms of teachers for special needs students. Funding for the specialized training needed to work with these students should be a part of any new federal legislation. Training teachers through in-service as well as pre-service programs should be expanded.

Title: New Public Priority: Education of Handicapped Children
Author: Edwin Martin
reprinted from Compact, August 1971, pp. 4-7 in
The Special Needs Student in Vocational Education
Editor: Stanley J. Urban and Thomas Tsuji
Publisher: MSS Information Corporation, New York
Date: 1974

Beginning with fiscal 1972 one of the major objectives of the U. S. Commissioner of Education has been the education of handicapped children with the goal of full educational opportunity for all by 1980. This is an important step not only because of the benefits to the child, but also to society in terms of the use of resources. The cost of institutionalizing a child is at least \$4,000 per year or approximately \$250,000 over a life time. Special education classes may cost as little as \$2,500 a year and the child is learning things that will make him or her less dependent on society--saving a great deal of money for the community. However, in order to accomplish this, commitment is needed on the part of the government and the school districts. Handicapped children need vocational education so that they can become full supporting members of the community.

II B. MAINSTREAMING: ALTERNATIVES TO SPECIAL EDUCATION CLASSES

Title: Will the Real "Mainstreaming" Program Please Stand Up!
(or ... Should Dunn Have Done It?)
Author: Jerry D. Chaffin
Publication: Focus on Exceptional Children, 6(5), pp. 1-18.

Chaffin refers to the practice of mainstreaming as alternative educational programs "characterized by the retention of the mildly retarded child in the regular education classroom with supplemental instructional support being provided to the regular classroom teacher."

Chaffin attributes the present emphasis on mainstreaming programs to: (1) the results of research on effectiveness of special classes for the mildly retarded; (2) the recognition that many of the diagnostic instruments used for identifying retarded children are culturally biased; (3) the realization that the effects of labeling a child may be more debilitating than the diagnosed handicap; and (4) court litigation related to placement practices and the rights of the handicapped to appropriate education treatment.

Four of the more common models for mainstreaming are presented as follows:

- (1) Deno's Cascade of Services. Deno's organizational model facilitates tailoring of treatment to individual needs by providing a wide variety of service options from the regular classroom with or without support through full-time special class to assignment of the handicapped to facilities governed by health or welfare agencies.
- (2) Lilly - A Training Based Model. Lilly offers a new definition of exceptionality which emphasizes the characteristics of the school situation rather than the characteristics of the handicapped student. He proposes a zero-reject system in which it would be impossible to administratively separate a student from a regular education program in the school, once the student is enrolled in the program. In this model the responsibility for working with the handicapped student lies with the regular classroom teacher, with special education providing only a supportive role. According to this model the major goals of special education should be to develop: (a) instructional specialists whose task would be to equip the regular teacher to deal with the class as it exists; and (b) the competencies of regular class teachers to the point where they no longer need special education support.
- (3) Gallagher's Contract Model. Directed mainly toward mildly retarded, disturbed, or learning disabled primary-age children, this model involves the adoption of a formal contract between parents and the school. Before a student is given special education services this contract would outline specific goals to be attained during the intervention program and would cover a time period of no longer than two years. The contract would be non-renewable, or renewable only under a quasi-judicial type of hearing with parents represented by legal or child advocate counsel.

- (4) Adamson's and Van Etten's Fail-Save Model. The authors of this model feel that many of the other models fail to offer enough alternatives to the handicapped child. The "fail" represents the system's failure to meet all students' needs, not the individual students' failure. The "save" represents the adaptation of the system to the students' individual needs. This educational continuum involves various levels of service to the handicapped student, with each level operating within a given time limit. When the time is up a given set of alternatives is available for the student, ranging from more intensive services, through recycling at the present level, to moving up one level to less intensive services.

After discussing some of the aspects of existing mainstreaming programs Chaffin concludes that it is too early for the "real" mainstreaming program to stand up and that as yet there is an insufficient data base for determining the effectiveness of the various programs in existence. Although the present mainstreaming programs do not offer proof that they are an improvement over traditional delivery systems, Chaffin feels that they "are certainly no worse and hold the promise of much more."

Title: Mainstreaming for the Secondary Educable Mentally Retarded:
Is It Defensible?
Author: Gary M. Clark
Publication: Focus on Exceptional Children, 7(2), pp. 1-5.
Date: April, 1975

Clark defines mainstreaming as "an educational programming option for handicapped youth which provides support to the handicapped student and his teacher(s) while he pursues all or a majority of his education within a regular school program with non-handicapped students." He then goes on to question mainstreaming as the only program option at the secondary level for educable mentally retarded adolescents for the following reasons:

- (1) We have no empirical evidence on adolescent retardates to indicate that movement from a partially developed approach (but demonstrably more effective than previous programs) to a new, centered approach is appropriate.
- (2) The curriculum focus of mainstreaming at the secondary level is not congruous with what has been identified as the needs of adolescent retarded.
- (3) The basic assumptions posed for secondary special education programming do not indicate that regular secondary programs or tracks are appropriate.
- (4) Career education concept programs are not yet adequately established in junior and senior high schools.

- (5) Support personnel for vocational education teachers, the group most obviously needed for an appropriate mainstreaming approach are not available.
- (6) The inflexibility of junior and senior high school policies and goals are not predictive of success for the educable mentally retarded.

Clark points out, however, that this questioning of the appropriateness of mainstreaming for educable retarded adolescents in no way defends the inadequacies of the present special class model, among them weaknesses in prevocational assessment, work adjustment training, and placement at appropriate levels of employment.

He also points out that any school that has the capabilities of flexible organization, adequate resource personnel, and a strong career education commitment should evaluate alternatives to special classes, not limiting themselves to one delivery model. Finally he warns that teacher education institutions must not overlook the reality of secondary schools rapidly moving into alternatives for special class placement for the educable retarded.

Title: Special Education for the Mildly Retarded-Is Much of It Justifiable?
 Author: Lloyd M. Dunn
 Publication: Exceptional Children, 35, pp. 5-22.
 Date: 1968

In this article, which is often credited as the main influence in reversing the trend-toward self-contained special classes, Dunn makes the statement that a better education than special class placement is needed for "socioculturally deprived children with mild learning problems who have been labeled educable mentally retarded." Stressing that he is not arguing for the phasing out of special education programs for the moderately and severely retarded, Dunn states the following reasons for questioning special class placement for the mildly retarded:

- (1) Homogeneous groupings tend to work to the disadvantage of slow learners and the underprivileged.
- (2) Results of studies on the efficiency of special classes for the mildly retarded suggest consistently that retarded pupils make as much or more progress in regular grades as they do in special education.
- (3) Our past and present diagnostic procedures have concentrated on finding out what is "wrong" with the student in order to label him, a process which lowers the expectations of both teachers and the student.
- (4) Regular school programs are now better able to deal with individual differences in pupils because of changes in such areas as school organization, curriculum, personnel, and hardware.

Dunn suggests that special education move away from attempting to remediate or live with the learning difficulties of pupils with whom regular educators have been unable to deal and strive to evolve a special education program that is either: (a) developmental in nature when responsibility for the total education of the more severely handicapped is assumed from an early age; or (b) supportive in nature, wherein general education would continue to have central responsibility for the vast majority of students with mild learning problems, with special educators serving as diagnostic, clinical, remedial, resource room, itinerant and/or team teachers, consultants, and developers of instructional materials and prescriptions for effective teaching.

Although Dunn admits to making no attempt to suggest an adequate high school environment for adolescents functioning as slow learners, the observations he makes on the role of special education and influence of this article on the mainstreaming movement contribute to its value in the mainstreaming literature.

Title: Exceptional Children in the Schools: Special Education in Transition (2nd ed.)
Author: Lloyd M. Dunn (Ed.)
Publisher: New York: Holt, Rinehart and Winston
Date: 1973

In the first chapter of this book Dunn presents major plans for delivery services to the handicapped. This conceptual model, based on the Keynolds framework (1962) and Deno's (1970) Cascade of Services, displays 11 administrative plans from the most integrated (Plans 1 and 2) to the most segregated (Plans 9, 10, 11). The 11 plans presented are:

- (1) Special education instructional materials and equipment only; enrolled in a regular day class.
- (2) Special education instructional materials and equipment plus special education consultative services to regular teacher only; enrolled in a regular day class.
- (3) Itinerant or school-based special education tutors; enrolled in a regular day class.
- (4) Special education resource room and teacher; enrolled in a regular day class.
- (5) Part-time special day class where enrolled; receives some academic instruction in a regular day class.
- (6) Self-contained special day class where enrolled; receives no academic instruction in a regular day class.
- (7) Combination regular and special day school; receives no academic instruction in a regular day class.
- (8) Special day school.
- (9) Special boarding school or residential facility.
- (10) Hospital instruction.
- (11) Homebound instruction.

Title: Mainstreaming: Toward an Explication of the Construct
Authors: Martin J. Kaufman, Jay Gottlieb, Judith A. Agard, and
Maurine B. Kukic
Publication: Focus on Exceptional Children, 7(3), pp. 1-12.
Date: May, 1975

The authors begin by setting three major influences which they feel provided the impetus for special education to implement mainstreaming services: (1) professional educators; (2) court decisions, and (3) state governmental policies.

The authors define mainstreaming as follows: "Mainstreaming refers to the temporal, instructional, and social integration of eligible exceptional children with normal peers based on an ongoing, individually determined, educational planning and programming process and requires classification of responsibility among regular and special education administrative, instructional, and supportive personnel."

The three major components of this definition are: (1) integration, (2) educational planning and programming process; and (3) clarification of responsibility.

Integration

Integration, as the authors define it, is composed of temporal, instructional, and social integration. Temporal integration allows the handicapped student time to become familiar to his non-handicapped peers and, hopefully, more socially acceptable.

Instructional integration concerns the extent to which the handicapped student shares in the instructional environment of the regular class. For instructional integration to occur: (a) the handicapped student's learning characteristics and educational needs must be compatible with the learning opportunities provided in the regular classroom and with the regular classroom teacher's ability and willingness to modify his instructional practices; (b) the special education services provided must be compatible with and supportive to the regular classroom teacher's instructional goals for the student. The authors see instructional integration as perhaps the most critical component of mainstreaming.

Social integration refers to the relationship between the handicapped student and his normal peer group. The authors describe social integration in terms of physical proximity, interactive behavior, assimilation (inclusive in ongoing social milieu), and social acceptance.

Educational Planning and Programming Process

As the authors define it, planning refers to the assessment of a student's educational needs and the determination of goals and objectives related to the educational services required by the student. Goals and objectives should be formulated in terms of the educational services required to meet the needs of the handicapped student. The nature and extent of the discrepancy between the educational needs of the handicapped and the opportunities available in the regular classroom provide an index to determine the intensity, content, and location of educational services required.

Programming refers to the identification and selection of regular and special education human, fiscal, and material resource alternatives available to provide the educational service required by the handicapped child.

The three remaining steps in this phase are development of the educational plan, implementation of this plan in an educational program for the student, and ongoing evaluation of this plan and program.

Clarification of Responsibilities

Clarification of responsibilities refers to the delineation and assignment of responsibilities necessary for effecting coordinated planning and programming by regular and special education administrative, instructional and supportive personnel. The assignment or assumption of responsibility can be: (1) exclusive, when an individual or program has independent jurisdiction; (2) alternating, when two or more individuals or programs have jurisdiction which is exercised interchangeably; or (3) consensual, when two or more individuals or programs jointly maintain jurisdiction.

The authors state that this clarification of responsibilities is critical to the effective implementation of the mainstreaming concept which requires an interfacing of regular and special education administrative, instructional, and supportive services.

Title: Some Thoughts on Mainstreaming
Author: Edwin W. Martin
Publication: Exceptional Children, 41(3), pp. 150-153.
Date: November, 1974

Martin, Deputy Commissioner of the Bureau of Education for the Handicapped, fears that educators are failing to develop their approach to mainstreaming with a full recognition of the barriers which must be overcome. He cites the following barriers to the mainstreaming of the special needs student.

- (1) The attitudes, fears, anxieties, and possibly overt rejection which may face special needs students from both their classmates and adults in the schools.

- (2) Efforts to provide training and experiences for regular classroom teachers are not keeping pace with the efforts to mainstream. Much of the training that will exist will fail to respond to the feeling and attitudes issues and not provide the intensively supervised practical involvement necessary.
- (3) There are a range of logical problems. Students come and go from classes at inappropriate times, special education teachers use different sets of materials from regular classroom teachers; and special and regular classroom teachers are often parts of different budgets.
- (4) There is not enough material effort in developing educational programs for each child. Martin's prediction is that the use of special education people to draw up plans for regular teachers to follow will fail because of its external orientation and because of manpower shortages.
- (5) There is a failure to evaluate carefully the student's progress toward specific educational objectives.

Martin concludes by stating that educators should not allow their beliefs in the promises of mainstreaming to cause them to be silent if they see faults in its application.

Title: The Alternative Movement in Special Education
 Authors: Edward L. Meyen, Glenn A. Vergason, Richard J. Whelan
 Publication: Alternatives for Teaching Exceptional Children: Essays from Focus on Exceptional Children
 Publisher: Denver, Colorado: Love Publishing Company
 Date: 1975

As the authors state, litigation involving individual rights such as the right to treatment, right to education, the right to due process, and class action suits has resulted in a challenge to placement of the handicapped in special classes, regarded as isolated and segregated educational settings. The primary model being promulgated as alternative to special classes is referred to as "mainstreaming."

The following principles are listed by the authors as underlying most mainstreaming programs:

- (1) The mildly handicapped students' primary educational placement should be in the regular class setting.
- (2) Instructional support personnel and services should be made available to each student, but should not function to remove the student from a regular class setting for a major portion of the day.
- (3) Placement and instructional decisions are made jointly by special and regular education personnel.
- (4) No placement is considered final.

- (5) An individually prescribed plan is developed and implemented.
- (6) Instructional responsibility is shared between the special education and regular teachers and other specialists involved in the program.

The authors cite three areas of concern arising from the mainstreaming movement:

- (1) Many materials and curricula used in self-contained classrooms are not appropriate for emerging alternative models.
- (2) It is not reasonable to expect that the success found with mainstreaming at the elementary level can be generalized to secondary level programs. The implementation of career education, academic preparation, teaching of life skills, and basic social development instruction must be carefully structured relative to delivery systems.
- (3) If alternative instructional systems are to be effective, personnel preparation must occur prior to or simultaneously with the implementation of systems. Specifically:
 - (a) regular educator certification requirements must include the mandate for realistic and desirable experiences with the handicapped and with special education personnel;
 - (b) personnel preparation curricula should include opportunities to change attitudes toward handicapping conditions, gain insight into individual variances, and obtain instructional knowledge and skills.

II C. THE NEW SCHOOL POPULATION: THE SEVERELY HANDICAPPED

Title: Changing Vocational Behavior through Normalization
Author: Simon Olshansky
Publication: In Wolf Wolfensberger The Principle of Normalization in Human Services
Publisher: Toronto, Canada: National Institution on Mental Retardation
Date: 1972

The author begins by stating the following assumptions about behavior: (1) each person seeking help has some capacity and need for self-direction and self-determination; (2) the amount of self-direction and self-determination possible for any person depends not only on factors within a person, but on opportunities outside a person; (3) revised expectations tend to raise performance; (4) any process of labelling and segregation tends to lower expectations; (5) growth and development occur best and most within natural settings; (6) persons are more likely to change through practice than through "talking therapies"; (7) nothing motivates a person as much as opportunity; (8) each person from the moment of birth, whatever his limitations has a natural drive toward independence and normality.

Olshansky stresses that the principal of normalization rests on the central importance of experience as a way of learning, "day by day, hour by hour." The more the available opportunities for experience approach the normal, the more the capacity for normal behavior can be actualized.

He then proposes a principle for the management of a sheltered work situation (workshop) which implements the normalization principle. These same principles can be applied to work with the handicapped in any job training and/or placement situation.

- (1) Instead of being forced to enter a workshop, the handicapped person should be consulted about his desire to attend a workshop and be invited to visit all possible workshops in order to make his choice of continuing or switching to another workshop.
- (2) The handicapped person should be called a "worker", not a "client", and the workshop should resemble a work place rather than a clinic.
- (3) If the workers are to have enriching experiences as workers, the workshop should be located within an adequate business building shared by other companies with normal workers.
- (4) The work should be real, intended for the market, and should vary in complexity so as to meet the varying interests, skills, and needs of the heterogeneous population of workers.
- (5) Workers should be paid wage rates prevailing in regular industry, with increments based on increased production. Money may not be everything, but in the labor market it is a measure of one's worth.

- (6) Work involving rags or objects sold as charity should be avoided since it tends to diminish a person's self-respect and pride.
- (7) Behavior should be more of a concern than attitudes and feelings.
- (8) The individual's potential for normal behavior will depend more on the kind and quality of opportunity he may be offered. We know little about the capacity of many persons to improve because we have never invested enough of our resources and talents in creating appropriate and timely opportunities.
- (9) While intellectuals debate the passing of the protestant ethic, for many disabled persons suffering intellectual, physical, or emotional limitations, work continues as one of the central facts of their lives. Without work they feel as if they are nothing.

Title: Comparison of the AAMD Heber and Grossman Manuals on Terminology and Classification in Mental Retardation
 Authors: Edward A. Polloway and James A. Payne
 Publication: Mental Retardation, 13(3), pp. 12-14.
 Date: June, 1975

In this article the authors compare the newest edition (1973) of the Manual on Terminology and Classification with the 1961 edition, both published by the American Association on Mental Deficiency. Grossman defines retardation as referring to "significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period."

The authors point out the following changes in definition and classification which affect the population to be classified as mentally retarded in the future:

- (1) The 1973 manual defines retarded performance at two standard deviations below the mean on IQ test, rather than the one standard deviation previously constituting the retardation classification. This eliminates the level of borderline retardation and sets the ceiling at 68 on the Stanford-Binet or 70 on the Wechsler.
- (2) The 1973 definition extends the developmental period from age 16 to 18.
- (3) The 1973 definition establishes impairment in adaptive behavior as a separate and distinct dimension which must be present in addition to low intellectual functioning. This tends to place a little more emphasis on this concept than was present in the 1961 definition.
- (4) The levels of retarded defined by Grossman are: mild, moderate, severe, and profound. These levels coincide with those of the 1961 edition, with the exception of the elimination of the borderline category, and are defined in the appendix on Terminology.

- (5) Grossman is more specific in dealing with the classification of adaptive behavior than was Heber in 1961. The establishment of a method of obtaining deviation social quotients from the Vineland and the development of the AAMD Adaptive Behavior Scales are listed as contributions to the effort to objectify this dimension.
- (6) The changes in the medical classification section of the 1973 manual, which serves to list major divisions in the etiology of mental retardation, reflect the advances in current medical research and thinking. A division of "chromosomal abnormality" was established, and the division of gestational disorders includes not only prematurity but low birth weight and post-maturity.
- (7) The term "psycho-social disadvantage" replaces cultural-familial retardation and is said to be present only with: (a) parent or sibling retardation, (b) likelihood of an impoverished environment, and (c) absence of primary pathological cause.

Title: Now More Than Ever: A Case for the Special Class
 Authors: James O. Smith and Joan R. Arkans
 Publication: Exceptional Children, 40(7), pp. 497-502.
 Date: April, 1974

The authors state that although Dunn (1968) and the subsequent mainstreaming articles have directed their criticism of special classes toward the mildly handicapped, the response of many writers has been to call for the abolishment of all special classes. The intent of this article is to develop a case for the special class as one viable administrative and educational arrangement for the more severely handicapped.

The Bureau of Education for the Handicapped has set 1980 as its goal for the state by state establishment of education-for-all laws. Since the outcome of the Pennsylvania Association for Retarded Children court action, sundry educational suits have been brought against different states, and more and more states are establishing education-for-all laws.

As a result of legislation and court decisions children and adolescents formerly referred to as "uneducable," "custodial," "dependent," and severely and profoundly retarded and multiple handicapped will become a new population in our schools and will not only include handicapped individuals who live at home but also residents of institutions who are now beginning to reside in foster and group homes in the community.

The authors feel that the education of the lower functioning retarded populations (with IQ's from 0 to 50 or 60) requires life long planning. Presently the goals in adulthood seem limited due to the unavailability of situations which provide adequate employment or facilities for the lower

intellectual strata of our population. Sheltered workshops and work activity centers now provide most of the work facilities. Adequate and intense education at a younger age and over a longer period of time holds promise of displacing many skill deficit areas which would allow severely handicapped individuals to fit into a broader range of existing work and social environments. The authors admit, however, that these individuals will still develop with many of their impairments, particularly physical impairments, unchanged.

The authors contend that the severely handicapped will be best taught and served by highly trained and skilled personnel in special class programs. They call for teacher training programs which would equip teachers with skills applicable to designing and teaching programs for individuals with "multiple and severe language, cognitive, conceptual, self help, motoric, and social skill deficits." The authors feel such teacher training should incorporate the disciplines of therapies (occupational, physical, and speech), precision or responsive teaching, behavior management, and human development, and should include practical experiences and in depth studies of vocational fields, including sheltered work stations.

III. SELECTED PROGRAMS FOR

SPECIAL NEEDS STUDENTS

The purpose of this section of the document is to give the reader an idea of some of the programs for special needs individuals which are in operation around the country. The focus is on a few programs at the local level which deal with students and their prevocational and/or vocational needs. This is, of course, only a small sampling of the many excellent programs.

Title: Getting Handicapped Students into the Mainstream
Author: Louis Sarandoulis
Publication: American Vocational Journal, pp. 22-25
Date: May 1975

This article describes the program of Camden County (N.J.) Vocational and Technical School System for mainstreaming its students. Before being enrolled in the program, the students go through an orientation program. This orientation program is conducted as a simulated industrial work experience in which the emphasis is on work habits and attitudes. On the basis of the orientation program, students are placed either in more specialized skill training programs, regular vocational school programs or on-the-job or work-study programs. The program has been so successful that plans are being made to increase their facilities to serve 800 students during the day and more than 3,000 adults in the evening. It is important to recognize the fact that without the seed monies available through the 1968 Vocational Education Amendments the program never would have become a reality.

Title: Project SERVE
Institution: East Metropolitan Special Education Council
Contact Person: Mr. Charles F. Wrobel
Executive Director
447 Macalester
St. Paul, Minnesota 55105

Project SERVE (Special Education, Rehabilitation, and Vocational Education) is a unique program combining personnel from three different disciplines and serving students in twelve different school districts. Student enrollment is over 600 and most have been labeled as educable mentally retarded or learning disabled.

Students have established vocational goals, receive school credit for work experience, receive one-half day in academics and one-half day in job training. Both prevocational and vocational training is provided. Students are supervised by trained vocational counselors who are dually certified in vocational education and special education.

ED 072 235

Title: Research in Developing a Program in Basic Vocational Studies. Final Report.
Institution: Brooke County Board of Education
Location: Wellsburg, West Virginia
EDRS PRICE: MF - \$0.65, HC - \$6.58

This report describes the research and organization involved for implementing a coordinated county academic-vocational program for mentally, physically, and emotionally handicapped students at the high school and post-secondary levels. An occupational survey and literature review preceded the development of a flexible academic curriculum providing basic instruction and remedial work in language arts and mathematical skills. Job orientation, vocational skills development for the occupations centering on food service and building maintenance, on-the-job training, and the services of a rehabilitation counselor are provided in this 4-year special program. Inservice training for professional staff, program evaluation, and accountability constitute major programmatic needs. The curriculum guide includes numerous unit outlines, term definitions, visual aids, program goals and objectives, and resource materials. Staff roles and responsibilities are delineated for this state funded developmental project.

Title: Occupation Training for Learning Disabled Youth
Institution: Nassau County Board of Cooperative Educational Services
125 Jericho Turnpike
Jericho, N.Y. 11753
Contact Person: Mr. William T. Callahan

This project is unique in that it serves learning disabled students from 5 to 21 years of age. The program activities aim toward occupational awareness, pre-occupational exploration opportunities, and in-depth occupational training. Students in the junior high school age range (11-16) are placed in seven pre-occupational laboratories. Students from 15 to 21 receive specific occupational training in horticulture, food services, health services, electronics, building maintenance, distributive education, and office occupations. Formal occupational training culminates with related cooperative work experience.

Title: Post-secondary Program for Deaf Students in Vocational Training
Institution: St. Paul Area Technical Vocational Institute
Contact Person: Mr. Robert Lauritsen
235 Marshall Avenue
St. Paul, Minnesota 55102

This training program illustrates the supportive services that are needed to maintain deaf students in an on-going vocational training program. All staff at the Institute receive training in manual communication. Supportive services to students include counseling, note-taking instructions, private tutoring, and auditory training.

Title: Special Vocational Program for the Handicapped
Institution: Salina AVT School
Salina, Kansas

The Special Vocational Program for the Handicapped serves secondary and post-secondary students with vocational handicaps resulting from a physical, emotional, or intellectual condition. It serves as a special referral section of the Salina Area Vocational-Technical School. It provides work evaluation, work adjustment, exploration, vocational training, placement, and follow-along.

Exploration and training is provided through work samples, OJT, and work experiences at the Vo-Tech School. Vocational training is provided in six occupational areas: welding, auto body, offset printing, aircraft assembly, diesel mechanics, and food service.

ED 100 104

Title: Work-Study Program for Handicapped Children. Final Report.
Institution: Butte County Superintendent of Schools
Location: Oroville, California
Date: 1974

Presented is the final report of a 3-year work study program (funded under Title VI) to increase the employability of 95 mentally or physically handicapped high school students. Project objectives included determination of requirements for 50 local jobs, development of 50 slide-film sets to provide job task information, assessment of student employability, placement and evaluation of qualified students in appropriate paid work stations, project evaluation, and dissemination of project information. Cited are project strengths (such as successful placement of target students),

project weaknesses (such as the need for more job qualification profiles), and recommendations (for workshops/conferences and meetings with local school officials). Reported are project results including determination of employment requirements for 57 local jobs, completion of slide-films and audiotapes for 22 jobs, completion of employability assessment of 85 students, and successful performance by 27 students in paid part-time work stations. Commendations by an audit team include praise for the variety of work stations developed. An appendix of project forms is attached.

Title: Career Training Center
Institution: Kern High School
Location: Bakersfield, California
Contact Person: Cecil Briscoe

The Kern High School District, Bakersfield, California, has established a Career Training Center in order to meet the needs of exceptional students within the district. The CTC is designed as a prevocational facility in conjunction with community work stations and the local high school. After completing training at the CTC, the student is able to enroll in regular skilled vocational courses at the regional occupational center. Included throughout the program is close coordination with the California Department of Vocational Rehabilitation.

Title: Habilitation of the Severely and Profoundly Retarded:
Illustrations of Competence
Author: G. Thomas Bellamy, Lesli Peterson, and Daniel W. Close
Publication: Clinical Research Paper No. 1, Rehabilitation Research
and Training Center in Mental Retardation. University
of Oregon, Eugene, Oregon.
Also in Education and Training of the Mentally Retarded,
1975, in press.
Date: None

This publication reports vocational training procedures used with severely and profoundly retarded individuals in the Specialized Training Program, a subcontract shop which performs small parts assembly work. In this particular report, two trainees were trained to assemble a 19-piece cam switch actuator and one trainee was taught to assemble a 52-piece cam switch actuator. Productivity rates were brought to normal rates and maintained.

Title: Keefe Technical High School Special Needs Program
Institution: South Middlesex Regional Voc-Tech School District
Contact Person: Mr. W. A. White
Director of Special Needs
750 Winter Street
Framingham, Massachusetts 01701

This program evolved from both Title III and Title VI grants. It is currently serving educable, trainable, and learning disabled students. It serves a primary area including Framingham and three nearby communities.

Students entering the program undergo four phases of training. The first phase is a trial period of 24 weeks of exposure to four vocational areas. Half of each day is spent in academics and the other half in one of the vocational areas. At the end of phase one, the students are evaluated and usually formally selected. Phase two consists of more training in the vocational area in which they demonstrated the greatest potential and spending at least two weeks in three on-site training positions. Following phase two training, the students are placed in part-time unpaid training where they are assisted 1 on 1 by their instructors. Students are considered to have completed the formal training when they have successfully spent 12 weeks in a position without major difficulty. Follow-up counseling services continue into phase four.

Title: Special Needs Program for the Handicapped and Disadvantaged
Institution: Calhoun Area Vocational Center
Location: Battle Creek, Michigan

Calhoun Area Vocational Center (CAVC) serves all students from the 13 school districts in Calhoun County, Michigan, for vocational training. It works in cooperation, as an extension of the school districts instead of as a separate entity. The students attend their home high schools for one-half day and CAVC the other half day for vocational training. Handicapped and disadvantaged students are fully integrated into the CAVC classrooms; they are not identified separately and in many cases are unknown to the vocational teachers. It is the responsibility of the home school to determine which of its students will attend the vocational center. Funding for this program comes from a county-wide tax and a vocational education project grant from the Michigan Department of Education and special education reimbursement from the Intermediate School District.

There is a special needs team at CAVC which provides assistance for any student with a special problem or a teacher who needs help understanding a student. The team is mobile and visits each area of the school daily and is on call to meet the needs of individuals within the school at any time.

Those within the school feel that the success of the program comes from (1) the support provided by the special needs team and (2) the extent to which students participate in planning their own programs.

Further information on occupational training programs is available in the following publications:

1. ESEA Title III Projects for the Handicapped. National Advisory Council on Supplementary Centers and Services, Winter 1975.
2. Improving Occupational Programs for the Handicapped. Management Analysis Center, Inc., 1225 Connecticut Avenue, N.W., Washington, D.C., 1975.
3. Selected Career Education Programs for the Handicapped. U.S. Department of H.E.W., Bureau of Education for the Handicapped, U.S. Government Printing Office, 1973.
4. Singletary, E. E. A Review of the Vocational Amendments of 1968 as Related to the Handicapped. ED 083 447.
5. A National Study to Identify Outstanding Programs in Vocational Education for Handicapped and Disadvantaged Students. National Association of State Directors of Vocational Education, 1971. Single copies available from: Mr. R. D. Anderson, Executive Director, NASDVE, 1599 Broad River Road, Columbia, S.C. 29210.

IV. ISSUES IN THE AREA OF COMPETENCY-BASED TEACHER EDUCATION

The purpose of this section of the document is to give a basic understanding of the CBTE or PBTE movement in the United States. Part A is presented to establish a common, working knowledge of the movement so that participants can discuss it and its ramifications for the development of programs for personnel preparation in vocational programming for special needs students.

Parts B and C include examples of competencies identified by several groups of special (B) and vocation (C) educators. These are presented as a starting point for the development of a list of competencies needed by special or vocational educators working with special needs students in the area of vocational programming. Descriptions of some of the delivery systems currently used in this instruction are also included.

Articles are listed in each section alphabetically according to author.

IV A. COMPETENCY-BASED TEACHER EDUCATION

Title: A Cautionary Appraisal of CBTE
Author: H. S. Broudy
Presented at Region V Conference on Competency-Based
Teacher Education, Chicago
Date: March 11-13, 1975

An appeal is made to vocational educators by Broudy that before jumping on the CBTE they should evaluate it closely. Teaching cannot be evenly divided into measurable components (specific competencies) without the loss of some important aspects (most notably, heuristics, teaching by induction, and philetics, teaching for satisfying human relationships). The affective domain cannot always be measured by behaviors and vocational teacher education must be aware of this when considering the application of CBTE to their program. Broudy feels that CBTE has the most value when used as a method of clarification and self-understanding rather than a theory of instruction.

Title: Assessment and Research in Teacher Education
Focus on PBTE
Authors: Donald M. Medley, Robert S. Soar and Ruth Soar
Publisher: American Association of Colleges for Teacher Education
Date: June 1975

This monograph deals with the need and methods for handling this need for assessment of CBTE programs. The authors suggest that assessment should be done at four separate points in the educational process, 1) teacher training, 2) teacher performance, 3) pupil behavior, and 4) pupil outcomes--so that there is a reduction in the intervening variables. They strongly advise against using pupil behavior as a method for evaluating teacher performance and recommend instead using a measurement of teacher behavior that is, how well does the teacher perform a given competency. This means there is a great need for research which addresses the problem of which competencies result in the desired student behavior or learning. Although special needs students' teachers are not mentioned, it would seem that sensitivity to these concerns should be apparent when designing competency-based programs for teachers of handicapped students.

Title: Competency-Based Education: The State of the Scene
Author: Allen A. Schmieder
Publisher: American Association of Colleges for Teacher Education
Date: February 1973

This document outlines the Competency-Based Education movement in the United States. The basic ideas that provide the focus for CBE are: 1) sharper focus on objectives, 2) individualization of the responsibility for learning, 3) more attention to individual differences, 4) individual assessment and feedback, 5) more effective integration of theory and practice, 6) evaluation focuses not only on what the learner knows, but how he performs, 7) the changing role of teacher from dispenser of knowledge to enabler of learning and 8) satisfaction with preparation of program for both students and teachers. Also included within the document are answers to some of the more basic criticisms of CBE and a bibliography of significant publications in the area of CBE.

Title: Empirically Based Teacher Education
Author: Robert M. W. Travers
Publisher: The Educational Forum
Date: May 1975

The article examines some of the bases for performance on competency-based teacher education. Travers is very critical of the literature which promotes CBTE without a research base or a definition. In some cases, competency-based programs have been designed in direct conflict with what research has found to be the format of a good teacher education program. Travers suggests that programs should be more in tune with research findings - especially training teachers to be productive problem solvers (creating solutions out of the problem solvers resources) rather than reproductive problem solvers (application of stereotyped solutions to standard problems). The author goes on to present his method of meeting the criticism of CBTE with effectiveness directed education.

IV B. COMPETENCY IDENTIFICATION FOR SPECIAL TEACHER EDUCATION

Title: Special Education for the EMR Adolescent: Student Needs and Secondary Education Teacher Competencies
Author: J. A. Bitter
Published in: Preparing Teachers of Secondary Level Educable Mentally Retarded: A New Model. Brolin and Thomas--Department of Rehabilitation and Manpower Services, University of Wisconsin, Stout: Menomonie, Wisconsin
Date: 1971

This paper stressed the similarity in educational needs of all adolescents and the need to place the emphasis on learning how to learn and think, rather than what to know and remember.

The competencies of teachers were suggested to be a resourcefulness in providing learning experiences (rather than emphasizing teaching methods) and the capability to identify and understand the needs of individual students. Educational programming, it was suggested, should be an unstructured, individualized approach which emphasizes the pursuit of individual and group interests by students through activity and experiences. It was further suggested that teacher training programs facilitate this approach by developing teacher resourcefulness and the guidance and communication skills necessary for facilitating learning and human functioning.

Title: Study of Effective and Ineffective Teachers of the Trainable Mentally Retarded.
Author: Robert B. Blackwell
Published in: Exceptional Children 39 (2), pp. 139-43
Date: October 1972

This study investigated the attitudes, characteristics, and personalities of 70 teachers of the trainable mentally retarded. The teacher competency rating scale used for purposes of the study included 28 specific teacher behavioral competencies which could be classified under seven more general competency statements. These are:

1. Has individual and group control with an emphasis on preventive aspects for helping students develop self-control.
2. Gets the students started on work; keeps them at work and interested.

3. Builds a feeling of personal worth in the student.
4. Structures or guides the learning.
5. Encourages cooperative interpersonal interaction.
6. Provides for a mind set or attention.
7. Draws from the students as well as just "pours in."

Title: Preparing Teachers of Secondary Level Educable Mentally Retarded: A New Model
 Author: Donn Brolin and B. Thomas
 Published: Department of Rehabilitation and Manpower Services,
 University of Wisconsin--Stout: Menomonie, Wisconsin
 Date: 1972

Research findings reported in this publication as well as by Brolin in Exceptional Children, May 1973, were used as a basis for development of a Bachelor's level training program focusing on student needs and teacher competencies to meet these needs. This program was designed to prepare a teacher who will:

- (1) Develop, teach, and evaluate an individualized curriculum consisting of the following:
 - a) Social and vocationally-related academics (e.g., communications, mathematics, social science, driver's education)
 - b) Remedial academics
 - c) Instruction in work habits development, work skills, manual abilities, activities of daily living (cooking, sewing, managing a home, purchasing, raising a family, leisure activities, civic responsibilities, etc.)
 - d) Vocational evaluation procedures and techniques (e.g., interest and aptitude tests, job samples, work tasks, situational assessments, on-the-job evaluation)
 - e) Behavior modification and other adjustment approaches. Devise a learning (or engineered) classroom setting using psychological and skill training techniques to improve performance and learning
 - f) Vocational training and skill development experiences (e.g., industrial arts, homemaking, etc.)
 - g) School and community work-experience
- (2) Coordinate the special education program with:
 - a) Regular classroom teachers
 - b) Vocational Rehabilitation
 - c) Employment Service
 - d) Social Services
 - e) Sheltered workshops
 - f) Industry and other employment sources

- (3) Analyze the employment opportunities available for special education students and devise a plan for assisting students in securing employment utilizing:
 - a) Dictionary of Occupational Titles, Guide to Jobs for the Mentally Retarded, Minnesota Occupational Adjustment Patterns (OAPs), etc.
 - b) Manpower reports
 - c) Employment Service information
 - d) Community surveys
- (4) Write vocational evaluation reports and recommendations
- (5) Conduct follow-up activities on former students and provide assistance when necessary
- (6) Conduct public relations activities
- (7) Recognize and identify organizations which can assist the retarded

The competencies are organized into specific courses that compose the special education portion of the program which are also described in this publication.

Title: Competencies Needed by Teachers of the Emotionally Disturbed and Socially Maladjusted
 Author: L. M. Bullock and R. J. Whelan
 Published in: Exceptional Children, 37 (7) pp. 485-89
 Date: March, 1971

This investigation involved a comparison of the Mackie, Kvaraccus, and Williams (1957) study and the results of the authors' attempts to determine competencies by having 47 teachers of the emotionally disturbed children complete the 88 item checklist, Teachers Evaluation of Competencies used in the Mackie, et.al. study.

Suggestions postulated by Mackie, et al. (1957) for teacher training programs were reported. They included: (a) the use of an interdisciplinary approach to enable teachers to serve as team members with psychiatrists, physicians, psychologists, social workers, probation officers, and other personnel, (b) to stress the theory and dynamics of personal social adjustment, (c) an emphasis on individual programming, (d) the development of guidance skills, and (e) a stress on research tools which might be utilized in the classroom.

Also reported were the competencies emphasized by Hewett (1966)-- (a) objectivity, (b) flexibility, (c) structure, (d) resourcefulness, (e) social reinforcement, (f) curriculum expertise, and (g) intellectual model. Hewett considered each a requisite for the others although the competencies were placed in a hierarchial framework.

The rankings of competencies in the present study were:

Rank Importance	Very Important Items	Rank Proficiency
1	A knowledge or understanding of the advantages of providing experiences in which pupils can be successful.*	2
2	A knowledge or understanding of the education and psychology of various types of exceptional children.	59
3	The ability to tolerate antisocial behavior particularly when it is directed toward authority.	1
4	A knowledge or understanding of basic human physical and psychological needs.	3
5	A knowledge or understanding of techniques adaptable to classroom situations for relieving tensions and promoting good mental health.*	4
6	A knowledge or understanding of the advantages of flexibility of school programs and schedules to permit individual adjustment and development.*	5
7	The ability to establish "limits" of social control (neither overprotective nor overrestrictive).	8
8	The ability to develop self imposed social control within the pupils.*	22
9	The ability to establish and maintain good working relationships with other professional workers, such as social workers and psychological personnel.	6
10	The ability to teach remedial reading.	25
11	The ability to avoid identical, stereotyped demands of maladjusted pupils.*	20
12	A knowledge or understanding of curriculum and methods of teaching the normal pupil.	7

* Items which were also rated "very important" in the Mackie study.

Title: Habilitation Personnel Training Project
Author: Gary C. Clark, Project Director; Department of Special
 Education, University of Kansas, Lawrence, Kansas

The Habilitation Personnel Training Project (HPTP) has designed and created a sequence of 29 competency-based instructional modules, arranged in 7 clusters, for training secondary special educators--both classroom teachers and work/study coordinators.

Competencies covered in the modules fall into four broad areas:

- (1) Identifying Student Needs. This area includes (a) identifying competencies needed by the handicapped student to function in his current and future environment; (b) collecting assessment data on the handicapped student to identify the status of his development with regard to the identified competencies; and (c) specifying the skill and knowledge development needed by the handicapped student.
- (2) Specifying the Habilitation Program. This grouping of competencies includes: (a) identifying and selecting available resources such as instructional resource personnel, referral resources, and content-related resources; (b) identifying and selecting available procedures, such as instructional methods, behavior management, communication and counseling, and evaluation procedures.
- (3) Implementing the Habilitation Program. These competencies are designed to be met in a student teaching or practicum situation and include (a) setting educational goals for each student based upon an identification of his needs; (b) employing selected instructional resources and procedures to implement the program; (c) designing and implementing a program for the practicum population; and (d) recommending appropriate changes for future program implementation.
- (4) Evaluating the Habilitation Program. This area includes (a) evaluating individual student progress toward stated objectives; and (b) evaluating program design components.

Field test of the HPTP modules is now underway and will continue at least through the 1975-76 academic year. A report presenting the specific competencies identified by HPTP will be available early in 1976. The Final Planning Report, delineating the approach taken by HPTP in identifying the competencies, is available now from the project.

Title: Education of Secondary Personnel: Assumptions and Preliminary Data
Authors: Gary M. Clark and Barbara S. Oliverson
Published in: Exceptional Children, 39 (7) pp. 541-546
Date: April, 1973

A questionnaire was sent to the person responsible for mental retardation programs in each state department of education to obtain data pertinent to the objectives of the study. These objectives were to determine: (1) manpower needs of secondary special education programs; (2) current certification requirements for both the secondary special education teacher and the work-study coordinator; (3) if, in fact, differential education does exist between elementary and secondary special education teachers; (4) expressed priorities of teacher education needs; and (5) the extent of mandated special education legislation including secondary level programs. Forty-seven (94%) of the states responded.

There was great variation among states in specific course or competency requirements for certification of teachers of the retarded at the secondary level. Five requirements suggested consensus: (1) valid teaching certificate, 87%; (2) student teaching or practicum, 85%; (3) general methodology for teaching the mentally retarded, 81%; (4) survey of exceptional children and field of special education, 74%; and (5) study of the field of mental retardation, 72%. Fields of study such as tests and measurements, secondary methods and curriculum for the retarded, and survey of speech disorders appeared consonant among about one-third of the states. All other areas mentioned were required by states one-fourth of the time or less.

In response to the emphasis provided by each teacher education program in their state, the state department respondents indicated that of 207 colleges and universities cited, 127 did not differentiate between the education of special education personnel at the elementary and secondary levels. Differentiated programs were reported for 80 colleges or universities with 71 of these emphasizing or restricting their focus to preparation of secondary classroom teachers and nine to the preparation of work-study coordinators.

State department priorities of preparation needs indicated a preference for the secondary teacher to be trained to spend a part of the day in the classroom and a part of the day in community work experience. The second priority involved the secondary teacher spending virtually all of his time in community work experience.

More research is suggested by the authors to clarify the relationship between manpower needs and the realistic roles which teachers are

asked to fill. The authors feel the findings of their study lend support to the recommendation of a differentiated education for teachers of elementary and secondary educable mentally retarded students and in education of work-study coordinators on the basis of maximizing effectiveness in functioning in the different personnel roles.

Title: High School Work-Study Programs for the Retarded
Author: K. Freeland
Published: Charles Thomas: Springfield, Illinois
Date: 1969

The teacher-coordinator is described as being concerned with all aspects of the school work-study program and with the liason activities affiliated with it. This person spends part of the day teaching and correlating instruction in the classroom, and part of the day coordinating the program in and outside of school in a variety of roles. The responsibilities often designated the teacher-coordinator were listed as:

1. Providing systematic classroom instruction.
2. Planning an instructional program.
3. Reviewing case histories and results of appropriate tests.
4. Selecting and devising instructional techniques, materials, and equipment.
5. Surveying business, schools, and industry for job sites.
6. Providing suitable job placement for students.
7. Interviewing prospective employers.
8. Preparing students for job interviews and for the world of work.
9. Locating, preparing, and utilizing training materials.
10. Supervising students on job sites.
11. Distributing, collecting, evaluating, and utilizing work progress reports.
12. Correlating work experience and training in the classroom.
13. Making referrals to community agencies when required.
14. Keeping accurate work-study records.
15. Providing individual and group counseling.
16. Providing for parent conferences and meetings.
17. Providing a "school-public information" plan for the program.
18. Preparing periodic reports, evaluations, and recommendations.
19. Maintaining close lines of communication with personnel concerned with the program.
20. Preparing and submitting work study-payroll for students when requested.
21. Maintaining effective public relations.

Title: As An Educator Sees the Need to Train Work Evaluators
Author: Paul R. Hoffman
Presentation, Stout State (Wisconsin) University
Date: 1967

Competencies required by a vocational or work evaluator were arrived at by review of the literature, consideration of the results of a work evaluation workshop, and from the results of a questionnaire study by the speaker. They are:

1. Knowledge of the rehabilitation process.
2. Knowledge and appreciation of disabilities and their implications with regard to work.
3. Ability to evaluate skills, training ability, attitudes, motivations, work habits, and personality strengths and weaknesses of disabled persons in a work setting.
4. Understanding of personality dynamics and social characteristics as pertains to man's ability to be economically self-sustaining.
5. Understanding of the world of work and the interacting factors between man and the demands of work.
6. Knowledge of existing occupations and entry requirements.
7. Ability to collect, analyze, and synthesize both objective and subjective data into a meaningful whole and write an effective report.
8. Ability to communicate effectively with clients, referral personnel, and all rehabilitation disciplines.
9. Ability to analyze jobs into their various components and construct meaningful job samples.
10. Ability to evaluate the effectiveness of his present techniques and to research new methods or improvement on present methods.
11. Knowledge of various referral agency programs and needs.

Title: Performance Education: Resources for Performance-Based Education
Author: W. R. Houston, et al.
Published: New York State Education Department, Division of Teacher Education and Certification and Multi-State Consortium on Performance-Based Teacher Education: Albany
Date: 1973

This publication presents an annotated, indexed listing of instructional materials. Resources annotated include films, slide/tapes, modules, programmed texts, and multi-media kits for training prospective or in-service educational personnel. Not included were: textbooks, materials

produced prior to 1967, resources for children, materials whose primary purpose is to teach content (e.g., English, mathematics, etc.) unless they are in modular format, descriptions of programs, or lists of objectives or competencies.

The Catalog of Teacher Competencies by Dodi (Tallahassee: Florida Department of Education, 1972) is used to index resources. This system classified objectives and materials within competency categories for educational personnel, particularly teachers. It is composed of seven general categories with from five to eight subcategories each. The complete list of competency classifications is:

10 ASSESSING AND EVALUATING STUDENT BEHAVIOR

- 11 -Selecting assessment instruments
- 12 -Designing and developing assessment instruments
- 13 -Collecting and quantifying data
- 14 -Diagnosing student difficulties or abilities
- 15 -Summarizing and interpreting data
- 16 -Involving students in self-evaluation
- 17 -Diagnosing student affective characteristics

20 PLANNING INSTRUCTION

- 21 -Selecting and specifying goals, aims, and objectives
- 22 -Selecting instructional strategies
- 23 -Organizing students
- 24 -Selecting or developing materials and activities
- 25 -Collaborating with others in planning
- 26 -Developing procedures and routines
- 27 -Evaluating instruction and instructional design

30 CONDUCTING AND IMPLEMENTING INSTRUCTION

- 31 -Structuring; establishing rapport and providing atmosphere
- 32 -Motivating and reinforcing students; providing for feedback
- 33 -Conducting discussion and small group activities
- 34 -Individualizing instruction and conducting individual activities
- 35 -Presenting information and giving directions
- 36 -Utilizing deductive, inductive thinking or problem solving
- 37 -Questioning and responding
- 38 -Utilizing audio-visual equipment and aids (resources)

40 PERFORMING ADMINISTRATIVE DUTIES

- 41 -Supervising aides, tutors, etc.
- 42 -Arranging physical environment
- 43 -Establishing and maintaining procedures and routines
- 44 -Maintaining records
- 45 -Organizing materials

50 COMMUNICATING AND INTERACTING

- 51 -Conferring with parents
- 52 -Counselling students
- 53 -Representing school and school programs
- 54 -Involving others in the school program
- 55 -Establishing and maintaining professional relationships

60 DEVELOPING PERSONAL SKILLS

- 61 -Accepting self
- 62 -Evaluating self
- 63 -Planning for self-improvement and improving self
- 64 -Accepting responsibility
- 65 -Developing subject-related skills
- 66 -Accepting others
- 67 -Solving problems

70 DEVELOPING PUPIL SELF

- 71 -Developing pupil self-concept
- 72 -Developing pupil social interaction skills
- 73 -Developing pupil learning to learn skills
- 74 -Developing pupil acceptance or responsibility
- 75 -Developing pupil attitudes and values

Title: An Investigation of the Teaching Competencies Needed to Utilize Diagnostic Test Data in Prescribing Occupational Learning Experiences in Teaching EMRs: Interim Report

Authors: Orville Nielson, Diane Johnson, and Keith Frank

Publisher: Menomonie, Wisconsin: Center for Vocational, Technical, and Adult Education, University of Wisconsin - Stout

Date: July, 1975

The purpose of this one-year project was to determine the teacher competencies needed in order to develop valid and effective occupational learning experiences for educable mentally retarded (EMR) students based

on available diagnostic test data and information. Six school systems, four secondary and two post-secondary schools, participated in the project. Each school team was composed of a special educator, a vocational instructor, and an A-V specialist. A fourth member of each team was a counselor, special educator, or vocational educator, depending on the most effective team organization within the participating school. Three workshops were conducted to investigate the feasibility of the in-service approach to training the competencies needed.

The project identified 74 competencies needed by vocational teachers in developing learning experiences for the EMR student. Competencies fall in the following areas: (1) identifying jobs appropriate for the EMR student; (2) task analyzing and detailing specific job content; (3) developing concrete learning experiences; (4) placing emphasis on student needs and characteristics in addition to content; (5) using classroom management techniques to provide for individually paced instructional activities.

Title: Needs for Teachers of Secondary Educable Mentally Retarded Students
Author: R. D. Pinegar
Published in: Preparing Teachers of Secondary Level Educable Mentally Retarded: A New Model. Brolin and Thomas - Department of Rehabilitation and Manpower Services, University of Wisconsin - Stout: Menomonie, Wisconsin
Date: 1971

The four main needs for training teachers of the educable mentally retarded secondary student identified were: (a) provision of opportunities for the teacher-in-training to see education in a very broad spectrum, (b) an exposure to and experience with the educational process for mentally retarded children beginning at the pre-school or elementary level through the high school, (c) an exposure to and experience with the world of work within the community which provide occupational promise for retarded persons, and (d) an extended practicum or intern experience at several levels of educational and intellectual development.

An example of the suggested training program, the Brigham Young University program for master's degree in the area of mental retardation, was then described.

Title: Clinical Teacher Model for Interrelated Areas of
Special Education
Author: L. A. Schwartz
Published in: Exceptional Children 37 (8) pp. 565-71
Date: April, 1971

A teacher preparation model for interrelated areas in special education was described in this article. The model provides behaviorally defined specifications for desired competencies, criterion measures for assessing entry and proficiency, and available instructional options for achieving the objectives. The program outlines for teacher education are from the junior undergraduate level through the master's level with possible extension to the doctoral level.

A clinical teacher of exceptional children with learning and behavioral problems is stated to require the following competencies: (1) The ability to diagnose children with varying exceptionalities (i.e., to possess the necessary skills to assess individual differences within the school setting regarding maturation, social, academic, and prevocational behaviors) (2) The ability to design and employ individualized instructional strategies, including skills in educational analysis, planning, curricula development, and media utilization.

The goals of teacher education were stated by defining competency areas as "Major Tasks", a set of sub-objectives or "enablers", and multiple sets of instructional options to lead the teacher toward the satisfactory performance of a behavioral objective.

Title: Adult Adjustment of the Mentally Retarded: Implications
for Teacher Education
Author: Howard L. Sparks and William J. Younie
Published in: Exceptional Children, 36 (1) pp. 13-18
Date: September 1969

After a brief review of the literature pertaining to the adult adjustment of the educable mentally retarded (EMR), the authors propose a tentative model for the preparation of teachers of secondary level EMR students.

Implications for educational programming for the EMR are suggested to include early rehabilitation intervention through cooperative programs; actual work experience in the final years of schooling; a well balanced

program in terms of academic, social, and vocational skills with the emphasis contingent upon the readiness of the learner; wide community involvement; and regular evaluation of students, staff, and administrative arrangements.

Suggestions for teacher education include: undergraduate level secondary (rather than elementary) training to increase knowledge of subject matter and higher achievement expectations; and graduate level course work and practicum experiences designed to develop the ability to understand and program for the needs of retarded students.

Title: The Preparation of Teachers for School-Work Study Programs in Mental Retardation
Author: W. J. Younie
Published in: Preparation of Work-Study Teachers of the Mentally Retarded: The Challenge of a Changing Society.
Conference sponsored by Project R.I.S.E., Special Education Department, Columbia University
Date: August, 1966

Following an extensive review of the literature, Younie indicated that the successful teacher is an educational diagnostician with a command of formal and informal testing techniques which permit the determination of educational level of functioning and the identity of specific learning difficulties the student is experiencing in various curriculum areas. In addition, the competent teacher (a) knows what curriculum development means, (b) knows many educational techniques from the developmental and remedial methodologies, (c) can differentiate between short- and long-range instructional goals and is able to maintain consistency while working with both, (d) recognizes that the community is the classroom, (e) has clearly defined his teaching responsibilities and attempts to develop other services to relieve him of wearing "many hats", and (f) is aware of research findings which might be helpful in the instructional role.

Personal qualities suggested were that the school-work-study teacher be pleasant, intelligent, interested in adolescents and in retardation, have some industrial and teaching experience, and be very familiar with the community in which he teaches.

The following was the suggested preparation program:

1. Courses and field experiences which give him a thorough knowledge of retardation with specific emphasis on its effect on the child's self-concept and development, its effect on the child's family, and the place of mental retardation in the dynamics of our social structure.

2. Training which provides insights into the psychological development of normal and retarded adolescents.
3. A study of the adult adjustment of the retarded.
4. Considerable course work and field experience in counseling and guidance techniques with special emphasis on referral procedures.
5. Study of tests and other educational diagnostic techniques. Consideration will be given to their administration and interpretation.
6. Exposure in depth to job analysis, occupational information, and other subject material which will assist the teacher in making job placements and in gaining feedback for use in curriculum development.
7. Considerable study of the philosophy and technique of building a curriculum for the school-work-study program.
8. Courses in public speaking, public relations, and similar topics which will assist the teacher to fulfill his appointed role in community relations.
9. Activities in the area of research designed to make the teacher aware of researchable problems and to provide him with the skills necessary to interpret and apply research results.
10. A thorough grounding in the content and techniques of the academic areas with particular emphasis on remedial procedures.
11. The opportunity to gain knowledge about industrial arts, home-making, and similar activities.
12. Practical experience with a master teacher so that all of the student's learnings may be integrated into an effective classroom experience.

Title: Personnel Training Needs for Cooperative Secondary School Programs for Mentally Retarded Youth
 Authors: William J. Younie and Gary M. Clark
 Published in: Education and Training of the Mentally Retarded 4 (4)
 pp. 186-94
 Date: December, 1969

This article was an attempt to define secondary work study programs in terms of the task demands of the professions involved--specifically the special education personnel and vocational education personnel.

Some of the tasks and responsibilities found in job descriptions of secondary special education personnel include: (1) screening, evaluating, and approving all referrals to the program; (2) planning and implementing secondary curriculum; (3) teaching and coordinating all instructional activities; (4) evaluating occupational readiness; (5) correlating classroom experience with work experience; (6) planning, securing, and supervising on-the-job training situations; (7) counseling pupils and parents

on social, personal, and vocational problems; (8) securing or assisting in securing job placements; (9) serving as liason person between the school and the state vocational rehabilitation agency; (10) maintaining school and work evaluation records; and (11) interpreting the work study program to school personnel and the community.

Writers in the field of general special education include some of the following as being essential or highly desirable personal characteristics and professional competencies of secondary teachers: (1) employment experience, preferably in the service occupations; (2) teaching experience, preferably in special education, vocational-technical education, or trade training; (3) a sincere interest in working with the academically less able student; (4) personal characteristics that will elicit respect and confidence with less able students; (5) a knowledge of vocational aptitude and potential; (6) a knowledge of the academic demands of the jobs typically performed by the mentally subnormal; (7) an understanding of adolescent personality and ramifications of mental retardation on personality development and social adjustment; (8) competency in education and/or vocational diagnosis and remediation; (9) skill in counseling on personal and social problems; (10) a desire or willingness to expand the classroom into the community; and (11) an ability to elicit and maintain cooperative relationships with school and community resources.

The article proposes a preparatory program for internal or external cooperative teachers of the secondary level and also a program for training vocational rehabilitation personnel.

IV C. COMPETENCY IDENTIFICATION FOR VOCATIONAL TEACHER EDUCATION

Title: Vocational Education for the Handicapped: A Competency Based Program
Author: Robert J. Brock, Program Director
Publisher: University of Wisconsin - Stout: Menomonie, Wisconsin
Date: 1975

This study was done by the University of Wisconsin-Stout in order to create a new model program for teachers of secondary EMR students. Returns from the mailed questionnaires suggest that most secondary special education teachers feel that EMR students can best be served by vocational or career oriented teachers as opposed to academic oriented teachers. The individual competencies ranked as "Very Important" were: 1) work adjustment, 2) job seeking, 3) personal care, 4) socially acceptable behavior, 5) job tryouts, 6) job placements and 7) vocational evaluation.

Title: Competencies and Performance Objectives
Author: Fred Cook, Project Director
Publisher: Department of Vocational and Applied Arts Education, Wayne State University, Detroit, Michigan
Date: September, 1972

This publication outlines the basic competencies identified by VAE faculty at Wayne State University as needed by the pre-service teacher for teaching in the areas of vocational education. The basic competencies are divided into seven parts: 1) plan, 2) instruct, 3) evaluate, 4) guide, 5) manage, 6) public and human relations, and 7) professional role. Also included are performance objectives and courses to be used in the acquisition of these competencies in subject matter and methods areas of vocational education. Although much of the learning is applicable, there is no specific mention of the special needs learner in this publication.

Title: Model Curricula for Vocational and Technical Teacher
Education: Report No. V General Objectives, Set II
Author: Calvin J. Cotrell, et al.
Institution: Ohio State University, Columbus, Ohio
Date: September, 1972
ERIC number: ED 069845

Cotrell and others developed a list of 390 competencies for vocational education teachers and coordinators using introspection and interview techniques in an occupational analysis, along with a representative national sample of 750 vocational teachers. Competencies were identified for ten areas: 1) program planning, development and evaluation, 2) planning of instruction, 3) execution of instruction, 4) evaluation of instruction, 5) management, 6) guidance, 7) school-community relations, 8) vocational student organizations, 9) professional role and development, and 10) coordination. Also included are criteria for the performance of each of the competencies.

Title: Pre-service Occupational Program
Author: Bessie Hackett, Project Director
Publisher: Illinois State University, Normal, Illinois
Date: May, 1974

The Pre-service Occupational Program or POP is a module based approach for delivering competencies to vocational educators. The general categories of competencies defined for use with this program are: 1) program planning, 2) guidance activities, 3) instructional planning, 4) execution of instruction, 5) evaluation of instruction, 6) coordination, 7) youth organizations, 8) operational activities, 9) public relations, 10) professional role, 11) program evaluation. Each self-instructional packet includes a module, tape, filmstrip and script. The modules contain performance objectives and enabling behaviors, preassessment, learning activities and evaluation. The student's work may be submitted for evaluation by the teacher at any point in the course. There is no specific mention of the special needs learner.

Title: Occupational Educational Leadership: A Performance-Based Approach
Author: Wayne S. Ramp and James C. Parker
Publisher: Department of Occupational Education, Southern Illinois University, Carbondale
Date: June 30, 1974

This publication deals with a performed-based graduate level program for preparation and certification of qualified directors of vocational education programs in the public schools. This program was developed in conjunction with Illinois State University, Bloomington. The performance areas with which this program is concerned are: 1) program planning and implementation, 2) staff recruitment, 3) personnel development and management, 4) program operation, 5) program management, 6) management of physical facilities, supplies and equipment, and 7) public relations. Each area is then broken down into enabling behaviors in order to accomplish the competency. Beyond traditional course work, the program also includes an internship.

V. EXISTING UNIVERSITY-LEVEL PERSONNEL PREPARATION PROGRAMS

This section deals with selected programs which are designed to help educate personnel who work or plan to work with special needs students. The programs included offer a variety of delivery systems and may provide ideas for those who are interested in implementing their own programs.

The name of the program, the university and its location as well as the person to contact for more information are included with the program description. The programs are listed alphabetically, according to university.

Title: Master's Degree Programs in: Special Education/
Vocational Education
University: Central Michigan University
Location: Mt. Pleasant, Michigan 48859
Contact person: Dr. Ronald Lutz

This program is designed to prepare teachers in home economics, business education, industrial education and special education to work with special needs students. This is accomplished through joint participation among the four departments and in courses which have been developed for the program. There are five courses required for all vocational/special education degree candidates. The required courses are:

VED 590 - Seminar: Survey of Vocational Education
Broad exposure to entry-level occupational experiences available through Vocational Education programs.

SPE 590 - Seminar: Survey of Special Education
Broad coverage of methods used in teaching students with physical, mental, and emotional disabilities.

VED/SPE 594 - Vocational Education/Special Education Curriculum Development.

VED/SPE 655 - Vocational Education/Special Education Practicum
Supervised involvement of Vocational and Special Education teachers with special needs students in a vocational environment.

VED/SPE 788 - Vocational Education/Special Education Internship
Supervised participation by Vocational and Special Education teachers in cooperatively planning, teaching, and evaluating special needs students in public vocational centers and residential institutions.

Other courses for the degree are selected within the major interest area of the four cooperating departments.

Title: Special Needs Personnel in Vocational Education
University: Glassboro State College
Location: Glassboro, New Jersey 08028
Contact person: Dr. Gerald L. Ognibene

This program is a cooperative effort between the departments of special education/services and industrial education and technology for pre-service instruction. Those who successfully complete the program are certified in New Jersey to teach the handicapped and industrial arts. Currently, there is no master's level program available, but there is one being planned which emphasizes internships and practica along with traditional course work.

Title: Special Vocational Needs Teacher Preparation
Universities: Kearney State College, Kearney, Nebraska
University of Nebraska, Lincoln, Nebraska 68508
Contact person: Dr. Dale G. Zikmund (Kearney)
Dr. Gary D. Meers (Lincoln)

The State of Nebraska has established a teaching certificate endorsement for teachers who work with special needs students in the area of vocational education. There is a series of three courses (developed by Zikmund and Meers) which provide the core for this program. The courses are:

- (1) V.E. 434/834 Introduction to Special Vocational Needs.
- (2) V.E. 435/835 Development and Implementation of Special Vocational Needs Programs.
- (3) V.E. 436/836 Occupational Guidance for Special Vocational Needs.

These courses may be used as part of an undergraduate curriculum or within various graduate curricula for teachers, administrators, and counselors.

Title: Special Education/Vocational Education
University: University of Kentucky
Location: Lexington, Kentucky 40506
Contact person: Dr. Clayton P. Omvig

This program involves both pre-service and in-service components as well as a resource center with materials to serve teachers of special needs students. There have been a series of summer workshops offered and the Departments of Vocational Education and Special Education are team teaching graduate level courses. There is currently no degree program in the area of special vocational needs but there is a plan to provide an M.S. option in Special Vocational Programs.

Title: Secondary Teachers of the Handicapped and Disadvantaged
University: Rutgers, The State University
Location: New Brunswick, New Jersey 08903
Contact person: Dr. Allan F. Rosebrock

This program was established in 1973 as an undergraduate degree program in Secondary Special Education. In addition to the undergraduate program, there is a sequence of 13 courses which are offered in the late afternoon and evening for in-service teachers. These courses comprise the work needed for additional certification as "Teacher of the Handicapped" for already certified vocational teachers. Although there is not a specific master's degree program, courses are available that can be used within an established program for those students wishing vocational education for special needs students.

Title: Professional Development Program for Vocational
Educators of Handicapped Students
University: University of Vermont
Location: Burlington, Vermont 05401
Contact person: Dr. Al Lampe

This program is an inter-agency, inter-departmental effort to provide public secondary schools and area vocational centers with competent personnel to work with special needs students. The program involves pre-service and in-service training for teachers, guidance and related personnel as well as administrators.

Courses specific to vocational education for special needs students have been developed and are offered to those undergraduates in special education, home economics and vocational education and technology who are interested in this area. Selected units are also offered each month at in-service locations around the state. There is strong emphasis on field-based experiences.

Currently there is no degree program for vocational education for special needs students at the University of Vermont. However, in the planning stages are B.S. and M.Ed. degree programs as well as a graduate program (Certified Consulting Teacher) designed to prepare personnel for leadership positions in the Area Vocational Centers.

Title: Center for Studies in Vocational and Technical Education
University: University of Wisconsin
Location: Madison, Wisconsin 53706
Contact person: Dr. Merle E. Strong, Director

The Center was established in 1964 in order to provide service to the total program of vocational, technical and adult education. In order to do this, the Center is involved with projects in: 1) research and evaluation, 2) curriculum, and 3) in-service and pre-service training. The Center carried on 23 different projects during 1974-75 which included maintaining the vocational research library, the information retrieval system (computerized access to instructional, research, etc. materials), and the resource materials system (materials available on free loan basis to Wisconsin students and teachers). In addition, the Center also provides survey, conference and consulting service as well as a number of publications of interest to vocational educators.

One of the major projects of the Center for 1975 is "Modifying Vocational Programs for the Handicapped." This is primarily an in-service activity accomplished through collecting relevant materials, exhibits and programs at conventions and consulting-advisory activities. This has been provided for teachers, administrators, agencies and employers as well as parents of special needs students.

Title: Special Fields Certification
University: University of Wisconsin-Stout
Location: Menomonie, Wisconsin 54751
Contact person: Dr. Robert Brock

The "Special Fields Certification" is a program with a core of five courses which lead to additional certification. These courses can be used in a pre-service curriculum for individuals in industrial education, home economics, physical education and art education who wish to work with special needs students, or through in-service programs for those vocational (and physical and art education) teachers who wish to gain the additional certificate. The courses offered are:

- 431-185 Introduction to Handicapped Youth
or
- 479-562 Psychology of the Exceptional Child
- 431-561 Education of Handicapped Youth: Education Management
- 431-562 Clinical Experience with Handicapped Youth
- 431-662 Classroom Management

GLOSSARY

The following definitions are provided with the hope of facilitating communication between conference participants in discussing the preparation of personnel to work with the special needs student. When possible, a definition common to both vocational and special education is presented. When these fields differ widely on a specific term, however, definitions from both the vocational and special education areas are included and designated VE and SE respectively.

ANCILLARY STAFF. (VE)¹ Ancillary staff refers to those whose service is in the areas of diagnosis, counseling, health services, curriculum development, and job-placement and follow-up. Ancillary staff members include: psychiatrist, psychologist, social worker, physician, school nurse, visiting nurse, optomologist, occupational/physical therapist, orientation and mobility specialist, speech correctionist, vocational adjustment/guidance counselor, vocational evaluator, evaluator aide, librarian, audio-visual technician, job placement and follow-up officer. Special education teachers serving in one of the following service delivery roles might also be considered as providing ancillary services to the vocational education staff consultant to regular teachers, itinerant tutor, resource room teacher, part-time special class teacher.

ANCILLARY (SUPPORT) STAFF. (SE) In special education this category also includes those personnel who provide services in the areas of diagnosis, counseling, health, and curriculum development. Job placement and follow-up and often vocational evaluation, however, are carried out by the core special education staff. Vocational education and other regular secondary classroom teachers could be education staff, particularly in the area of specific curriculum development for the special class.

COOPERATIVE WORK-STUDY PROGRAM. (SE) A local school work-study program which functions under an established formal agreement between the school and the state office of vocational rehabilitation. In some states, the state department of vocational education is also a part of the formal agreement. The formal agreement serves to delineate areas of individual or joint responsibility and provides a legal base for obtaining support for funding.

COORDINATOR (PREVOCATIONAL/WORK EXPERIENCE/WORK-STUDY).¹ A member of the school staff responsible for administering the work experience program and resolving all problems that arise between the school regulations and the on-the-job activities of the employed student. This person is frequently designated as prevocational coordinator if his primary responsibility is with students in the prevocational services program. The coordinator's responsibilities are similar whatever his specific job title.

DEINSTITUTIONALIZATION: This term refers to the major effort in the past few years to reduce the number of people in institutions, for legal, humane, and economic reasons. The process of deinstitutionalization requires that we prevent future admissions to institutions and effectively serve those coming from institutions by finding and developing in the community methods of care and education suited to the needs of this population. The trend toward deinstitutionalization and the court-established right to education for all types of handicapped persons have established the more severely handicapped as a population that must now be served by the public schools.

ITINERANT TUTOR.² This special education specialist spends 50 percent or more of his/her time in direct services to handicapped students in the regular classroom, with the remainder of his/her time devoted to consultative services with the regular class teacher. In addition to tutoring the itinerant teacher also observes, diagnoses, prescribes, evaluates, prepares and/or provides specialized instructional materials and equipment. Many of these teachers do this specialized tutoring and small-group instruction in the regular classroom in a team-teaching situation with the regular teacher.

LEAST RESTRICTIVE ALTERNATIVE.⁴ The principle based upon the legal premise that when government does have a legitimate goal to accomplish, it should do this by means that curtail individual freedom to the least extent possible while still attaining the goal. Applied to education this principle demands that if a handicapped student's needs can be met in a regular educational program (possibly with support services), this alternative should be followed over the more restrictive alternative of placement in a special class.

LOW INCIDENCE HANDICAP.¹ Handicaps that involve visual, hearing or orthopedic-health impairments.

MAINSTREAMING. Dep placement of a handicapped student in a regular classroom with supportive services available to insure that the student's academic and social behavior progress as expected.

MILDLY RETARDED (EDUCABLE) ADOLESCENTS AND ADULTS. Individuals scoring between two and three standard deviations below the mean in intelligence tests (52-67 IQ on Binet) and showing mild deficits in adaptive behavior, particularly in vocational performance and social responsibility.

MODERATELY RETARDED (TRAINABLE) ADOLESCENTS AND ADULTS. Individuals scoring between three and four standard deviations below the mean on intelligence tests (36-51 IQ on Binet) and showing moderate deficits in adaptive behavior, particularly in vocational performance and social responsibility.

NORMALIZATION.³ Utilization of means which are as culturally normative as possible in order to establish and/or maintain personal behaviors and characteristics which are as culturally normative as possible.

ON-THE-JOB TRAINING. Training in general and specific job expectations for a given job as a part of the on-going operation of a particular business, industry, or service. Training may or may not be compensated but when it is, it is usually at the minimum or beginning pay scale.

PART-TIME SPECIAL CLASS TEACHER.¹ This special education teacher works with handicapped students who are based in a special class but receive some of their academic instruction in the regular classroom.

PREVOCATIONAL SERVICES (EDUCATION TRAINING).¹ This term refers to the process whereby an individual with a vocational handicap gradually acquires those basic skills, work attitudes and behavioral patterns that will enable him to progress toward a specific occupational goal.

PROFOUNDLY RETARDED ADOLESCENTS AND ADULTS. Individuals scoring below five standard deviations from the mean on intelligence tests (IQ 19 and below on Binet) and showing profound deficits in adaptive behavior, particularly in vocational performance and social responsibility.

RESIDENTIAL SCHOOL.² This type of facility includes the traditional boarding school for the blind and the deaf and residential facilities such as training schools for the moderately retarded, hospitals, and detention homes for the socially maladjusted.

RESOURCE ROOM TEACHER.² A special educator who works with handicapped students who have been referred from the regular classroom to a resource room to use specialized equipment and materials and/or to receive specialized instruction, either in a one-to-one or small group situation. The student still receives much of his instruction in the regular classroom.

SELF-CONTAINED SPECIAL CLASS TEACHER.² A special education teacher who works with handicapped students who receive all of their academic instruction in the special education classroom. These students, however, often take such courses as industrial arts, home economics, music, art, and physical education in the regular classroom. Under this plan, pupils with one type of handicap are enrolled in the same special class.

SEVERELY RETARDED ADOLESCENTS AND ADULTS. Individuals scoring between four and five standard deviations below the mean on intelligence tests (20-35 IQ on Binet) and showing severe deficits in adaptive behavior, particularly in vocational performance and social responsibility.

SPECIAL DAY SCHOOL.² This type of school usually only serves one type of handicapped student such as the orthopedically handicapped or emotionally disturbed. Students in this type of school are separated from the regular public school classes, but have the advantage of a physical plant specifically designed for their type of handicap and a range of trained special educators.

SPECIAL EDUCATION CONSULTANT TO REGULAR CLASSROOM TEACHERS.² A special education professional who primarily provides indirect services to handicapped students by working with the regular classroom teachers. Consultants are defined as devoting 50 percent or more of their time to indirect services. Ideally, after observing the regular teacher working with the student with a learning problem, the consultant does diagnostic teaching in an attempt to prescribe and provide the special instructional materials and methods the pupil needs. He/she also assists in the continuous evaluation of the student.

SPECIAL NEEDS STUDENT.¹ A student who has a mental or physical handicap and/or an academic, socioeconomic, cultural or other disadvantage that prevents him from succeeding in a regular educational program.

SOMEONE WITH SPECIAL NEEDS: AN ALTERNATIVE DEFINITION.⁴ This is an individual who is having difficulty succeeding in a regular or special, career-oriented educational program due to the effects of a disability, disadvantage, and/or dysfunctional school placement, and who requires:

1. individually prescribed, unique and more powerful teaching techniques,
2. supplemental or supportive services which vary in type and extent depending on individual need, and
3. additional resources from society for his education and for his acceptance by society.

SUPPORTIVE SERVICES STAFF. Personnel, excluding the instructional staff and administrators, who provide special services to handicapped and/or nonhandicapped students. While there may be some overlapping, supportive services staff generally refers to paraprofessionals and volunteers who directly assist the handicapped student performing in all aspects of the classroom situation.

VOCATIONAL ADJUSTMENT.¹ The process whereby an individual achieves the fullest use of his potential in an occupation which is satisfying, which provides the means for economic independence and security, and which contributes to society.

VOCATIONAL ADJUSTMENT COUNSELOR.¹ A person with background and experience in serving individuals with special needs who helps the individual to understand himself and his opportunities, or make appropriate adjustments, decisions, and choices in light of his unique characteristics, and to initiate a course of training or work in harmony with his selection.

VOCATIONAL ASSESSMENT (EVALUATION).¹ Determination of those assets and liabilities of an individual that are pertinent to his/her choice of career goals. Aspects of this assessment process include aptitude profile, interest rating, temperament conditions, physical limitations, mental and/or educational limitations, work attitudes, behavior record, and previously acquired vocational skill competencies.

VOCATIONAL COUNSELING.¹ Assistance to individuals in selection of objectives and guidelines leading to the achievement of career goals. The individual's educational, social, personal and vocational adjustment all should be considered as part of the "vocational" counseling process.

VOCATIONAL EDUCATION.⁵ Vocational or technical training which is given in schools or classes (including field or laboratory work and remedial or related academic and technical instruction incident thereto) under public supervision and control or under contract with a state board or local educational agency, and is conducted as part of a program designed to prepare individuals for gainful employment as semiskilled or skilled workers or technicians or subprofessionals in recognized occupations and in new and emerging occupations, or to prepare individuals for enrollment in advanced technical education programs, but excluding any program to prepare individuals for employment in occupations generally considered professional or which require baccalaureate degree or higher.

VOCATIONAL (WORK) EVALUATOR.¹ An individual skilled in the administration and interpretation of vocational assessment tests and other types of vocationally oriented evaluation procedures.

VOCATIONAL HANDICAP.¹ A handicap affecting an individual to the extent that he is not succeeding or cannot be expected to succeed in a regular program, but requires a program modification, supplemental services and/or special vocational program in order to benefit from vocational-technical education.

VOCATIONAL REHABILITATION. Vocational rehabilitation refers to a process of assisting an individual who has a mental and/or physical disability, which poses a vocational handicap with services designed to return him/her to remunerative employment. Vocational habilitation would be a more accurate term for serving those with similar handicaps, but who have never been in remunerative employment. Service in either case usually include diagnoses, evaluations, counseling and guidance, physical restoration, training, provisions of prosthetic appliances, maintenance and travel during training or while receiving services, and follow-up. Each state has an office charged with providing these services but private agencies may also provide one or more as a part of their programming.

WORK ADJUSTMENT TRAINING.¹ Structured, controlled training by which an individual's work environment is controlled so that appropriate behaviors and physical tolerance and capacities are learned and maintained and inappropriate behaviors are extinguished.

WORK AND JOB SAMPLES.¹ The former are tasks or activities that are found across many jobs, while the latter consist of a model or replication of an actual job or part of a job that exists in industry. Both are often used in the vocational assessment process.

WORK EXPERIENCE.¹ A program having as its purpose the supervised part-time or full-time employment of students with the intent of assisting them in acquiring desirable work skills, habits and attitudes, and/or providing specific occupational training on the job. Work stations for the work experience program may be either on-campus or in-the-community. In vocational education both cooperative work training, in which the part-time job held by a student need not be related to the occupational objective of the student and cooperative work experience (often referred to as cooperative occupational education), in which the part-time job is designed specifically to further the student's occupational goals, may be considered part of the work experience program. Traditional names assigned to cooperative work experience on the local level include Agricultural Cooperative Education, Industrial Cooperative Education (ICE), Health Cooperative Education, Distributive Education (DE), Home Economics Related Occupations (HERO), Office Occupations (OO), and Diversified Occupations (DO).

WORK STUDY (VE).¹ A program designed to provide financial assistance, through part-time employment, to students who have been accepted for full-time enrollment in vocational training. The part-time employment is based on the financial need of the student and is not necessarily related to his career objectives. Students are employed in non-profit institutions.

WORK-STUDY (SE). A program, usually at the senior high school level, which includes both a work experience and an in-class instructional component. These components are designed to support and complement each other in providing the handicapped student with the skills necessary for successful adult adjustment. The exact sequence of in-class and work experience situations is determined by the needs of the individual student but usually includes a decrease in the amount of time spent in class and a corresponding increase in work experience time as the student approaches graduation.

FOOTNOTES

1. Claire Olson Szoke, To Serve Those Who Are Handicapped. Champaign, Illinois: Technical Education Research Centers/Midwest, September, 1973.
2. L. M. Dunn (Ed.) Exceptional Children in the Schools: Special Education in Transition. New York: Holt, Rinehart and Winston, 1973.
3. L. Allen Phelps, "Someone With Special Needs - An Alternative Definition" Illinois Career Education Journal. Winter, 1975.
4. W. Wolfensberger, The Principal of Normalization in Human Services. Toronto, Canada: National Institute on Mental Retardation, 1972, (p. 28).
5. American Vocational Association, Vocational-Technical Terminology. Washington: American Vocational Association, 1971.